The Daily Digest

Prepared by the Press Service for the use of USDA employees. Views and opinions in these items are not necessarily approved by the Department of Agriculture.

Washington, D. C., August 3, 1942

AUTO, FARM EQUIPMENT INDUSTRIES AID SALVAGE DRIVE. (Victory, July 28) Organized volunteer efforts of two of the country's leading industries have been added to the WPB Conservation Division's intensified Nation-wide salvage program. The Automotive Safety Foundation with its membership of rubber, automotive, and oil companies, and the Farm Equipment Institute and National Retail Farm Equipment Association, representing the manufacturers and dealers of farm implements are the two groups which will join the salvage drive. These groups, through their dealer organizations, have volunteered to provide [illegible] official receiving depots to accept donations of scrap metal and rubber, or to help local salvage committees locate such depots on vacant lots or in empty buildings. The companies are also contributing part of their commercial radio time, press and poster space.

NEW RED CLOVER. (Successful Farming, August) In widely scattered tests thruout the portions of the red-clover belt to which they are adapted, the new Midland and Cumberland varieties have produced from one-fourth to a ton more hay an acre than varieties commonly used. Because of their resistance to anthracnose, Midland (adapted to the northern half of the red-clover belt) and Cumberland (to the southern half) greatly lessen the risk of crop failure and the waste of seed and labor, reports J. C. Hackleman, agronomist of the University of Illinois.

GOVERNMENT BUYS CITRUS JUICES TO AVOID SCURVY; IMPROVED PROCESSING METHODS. (Science Service, Release, July 7) Over a half million gallons of concentrated citrus juices have been ordered by the Government in Florida alone in an attempt to avoid scurvy outbreaks among the peoples at war due to vitamin C deficiencies. Improved methods of processing the fruits have been developed at Winter Haven by the U. S. Citrus Products Laboratory. A large plant to be used for this purpose has just been completed for the U. S. Department of Agriculture. The concentrated juice is now being put into medicine bottles for rationing to British children. By preparing the vitamin in concentrate in a special vacuum chamber a thick flavorful syrup is obtained which contains 85% of the original vitamin content.

BRAZIL'S NEW BAG FACTORY. (Foreign Commerce Weekly, July 25) To manufacture bags in which the native fiber "guaxima" will be used, in combination with jute, a factory has been established at Victoria, in the State of Espirito Santo, Brazil. The new industrial plant has an annual capacity of 1,500,000 bags. The fiber is obtained from plants growing chiefly in the Amazon Basin.

CANADIAN GRAIN, MEAT PROSPECTS. (Foreign Commerce Weekly, July 18) Grain crop prospects in the Prairie Provinces are unusually favorable. With few exceptions moisture conditions are good to excellent. Abundant moisture will minimize grasshopper damage, but wheat-stem sawfly damage may be more serious than last year. Incomplete returns to the Wheat Board indicate that the acreage seeded to oats, barley, and flaxseed is larger than last year, and wheat acreage in the Prairie Provinces is slightly higher.

Meat supplies are expected to be short from July to October. Pork will not be plentiful because bacon exports must continue in large volume to fill the 600,000,000-pound contract with Britain. Hog marketings, now nearing their seasonal low, are greater than last year but will not be large enough to fill the British contract and at the same time allow normal Canadian consumption. Beef supplies are already short in some areas and cattle marketings from grasslands have not yet started in large volume.

SWEET POTATOES FOR FEED. (Farm Journal and Farmer's Wife, August) Sweet potato meal for feeding is no longer just an idea in Dixie. It is the real thing. Farmers in the community around St. Francisville, Louisiana, are selling cull sweets to a sweet potato feed mill, and are getting enough for the culls to pay nearly half the production cost of their sweet potato crop. An acre yields 80 bushels of culls, and some farms grow 50 acres. Growers have been getting $5 a ton for culls (about two tons per acre). Some of the farmers who have livestock take half of the meal from their culls instead of the $5-a-ton cash price. Three tons of potatoes make one ton of feed. This drying plant, the only commercial plant making sweet potato meal, can handle 24 tons of potatoes in eight hours. That means it can take care of 1,200 acres of culls, running three shifts a day for 100 days. It will turn out 700 tons of meal (sold as "Yameal") this year.

NEW STUDIES HEMISPHERE EFFECTS OF U. S. CONTROLS. (Foreign Commerce Weekly, July 25) A study of the effects of the United States export controls and other wartime economic regulations in the American Hemisphere has been started by the Board of Economic Warfare. Officials are making surveys in the other American Republics designed to ascertain what improvements can be made in the operating machinery to aid inter-American trade and the economies of the other Americas. Col. Royal B. Lord, Assistant Director of the Board of Economic Warfare, in charge of the Office of Exports, has been in South America to extend the study. In the Office of Exports are centered wartime controls over goods moving to the Americas. This office supervises export licensing of equipment for special industrial projects in South and Central America.

PREVENTION OF SWINE ERYSIPELAS. (Article in Successful Farming by Charles G. Grey, U. S. D. A.) Editors' Note: Several Cornbelt states now have access to the culture-serum treatment for prevention of swine erysipelas. This experimental method, which so far has produced gratifying results, is under supervision of state departments of agriculture and the Federal Bureau of Animal Industry. Swine raisers interested in this treatment are required to sign an agreement which releases all parties concerned from any responsibility in case of unfavorabe reactions. It is not intended for use on any farm except where swine erysipelas already exists.

DEHYDRATED BUTTER GETS BRITISH APPROVAL. (Dairy Record, July 8) Melbourne, Australia--(By Cable)--Austalia's new dehydrated butter is meeting with the approbation of British food authorities, declared the Producers Cooperative Distributing Society, whose head-quarters are in Sydney. Thus far several shipments of the new product have been sent to Britain and arrived there after their long ocean voyage in excellent shape. The British government has contracted to purchase up to 40,000,000 pounds during the 1942-43 season.

The process used in New Zealand is described as follows: "Only pure unsalted whey butter is used in the manufacture of dry butterfat, though experiments are being carried on to provide an outlet for creamery butter as well. The butter is melted over a jet of steam and the melted fat and condensed steam are run into a cylinder which automatically separates the water that settles by gravity from the butterfat-water solution. After then going through two cream separators the material undergoes a final process of dehydration in a vacreator. It is then subjected to a special technique of cooling, filled into sterile canisters and sealed. It can be stored and shipped as general cargo. "The product can be used in its dry state by pastry cooks and ice cream manufactures and the conversion of fat into butter is achieved simply adding water and salt. It is regarded as a suitable item in a parcel to soldiers and prisoners of war as it keeps better than tinned butter."

BALBO RYE. (Successful Farming, August) The rapid fall and spring growth of this new rye has endeared it to dairymen and produced a rush of buyers in Missouri, Nebraska, Iowa, and other states. It is ready for pasture 10 days to two weeks ahead of barley and other small grains in the spring. In the fall it is ready for pasturing four weeks after seeding. Tests at the Missouri Experiment Station show that milk of cows on this crop was as free of taint or off-flavor as the milk from cows on good bluegrass pasture. Several cheese factories and milk plants have obtained seed supplies to sell to their producers at cost.

Since this rye fades out in May, it makes a good nurse crop for Korean lespedeza. The variety does well on the less fertile soils, producing upright growth, and under Missouri conditions it is fully winter-hardy. In Nebraska its hardiness is satisfactory, but unequal to Rosen, Dakold, and Nebraska Common. Buyers should obtain seed only from reliable sources. Balbo was tested and developed by the Tennessee Experiment Station.

SEND YOUR TYPEWRITER TO WAR. (OWI release, July 30) Phone the dealer from whom you bought your machine, or any other typewriter dealer in the phone book. Toll him you have a typewriter to sell to the Government and ask him to call and look it over. He will inspect the machine, making sure it comes within the age limit, and quote the trade-in allowance as of February 1, 1941. When you sell it to him, he will affix to the machine a label reading: "Property of U. S. Government ... severe penalties for unlawful use." That is your guarantee that your machine will not go back into ordinary trade channels. A minimum of 300,000 typewriters is the goal.

There is scarcely a war operation which does not depend to some extent on the use of a typewriter. A Navy long range patrol bomber, scouting for submarine, usually carries a typewriter on which to record radio messages and set down a detailed and legible report of the chase.

Front line posts of the Army Medical Corps must have typewriters to register identification of the wounded as they are brought in from the fighting lines. Our submarines, tap out the completion of their tasks on the typewriter. That last-second weather report, so important to the success of an Army bomber flight, must be typewritten to insure legibility. Those are only a few of the combat services to which typewriters are put by our armed forces. In the Navy alone, normal needs included 59 typewriters for each battleship: 55 for each aircraft carrier: 30 for each cruiser; 7 for each destroyer. Radioed messages from the flagship of the fleet must be typed in duplicate and rushed to each officer on each ship who is concerned with the order.

Only standard size typewriters are wanted; no portables. They must not be over 7½ years old; only machines made on or after January 1, 1935, can be put to use.

TEN RULES TO REMEMBER. (The Progressive Farmer, August) In a new booklet, What Can I Do?--The Citizen's Handbook for War, published by the Washington Office of Civilian Defense, farm families are asked to remember these ten important rules in their everyday farm work:

(1) Save oil. (2) Save gasoline. (3) Conserve steel by re-using baling wire. (4) Use binder twine economically. (5) Repair old machinery and bring it back into use. (6) Share farm machinery and equipment with your neighbors. (7) Help your neighbor and exchange work with him so that you both may be able to handle your peak load of work. (8) Use higher-analysis fertilizer so as to get larger quantities of nitrogen, potash, or superphosphate in each 200-pound bag, thus saving labor, transportation, and bags. (9) Hurry every pound of metal, burlap, and rubber you do not need on its way into war production. (10) Grow and preserve as much food as you can for your own use and for market.

THINNER MILK CANS. (Dairy Record, July 8) Plans being developed to make possible the conservation of steel by producing thinner milk cans will make possible the production of 82 cans per ton of steel instead of 70 at present, according to WPB. Studies are also being made to find a method of tinning only the inside of the cans, instead of tinning both sides, as at present. Last year, 1,500,000 milk cans were made, and the demand has increased considerably this year because of higher milk production. WPB investigators believe that the increased number needed can be provided without a material increase in the amount of steel needed by resorting to thinner cans, and that coating them only on the inside will effect a large saving of tin.

OPA SETS SOAP STANDARDS. (Victory, July 28) American consumers have been given a guarantee by Price Administrator Henderson that the $500,000,000 they will spend this year on soap will buy at least as much as it does at present and that the quality will not be debased. In the first OPA regulation dealing exclusively with size and quality of a commodity, the Price Administrator set the types of soap now being sold in different parts of the country as minimum standards for the manufacturers. All forms of household soaps are covered--toilet, laundry, flake, chip and granule--and no reduction in the size of cake or package, or deterioration in the quality, or "serviceability," can be made.

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NEW TYPE OF FACTORY IN CHINA. (Foreign Commerce Weekly, August 1) "Hit-and-run" factories in China are now producing farm implements, in addition to many other articles, according the the British press. The factories are operated by guerilla bands and are frequently established close to the battle lines. If one location becomes untenable, the workers literally pick up their machines and supplies and move their factories into safer territory. Machine tools are being made in similar factories, many of them by hand or with water-power lathes. Other factories are used for silk reeling, weaving, paper making, printing, and for making cotton clothes and shoes. It is claimed that in all about 50 different articles are now being produced in "hit-and-run" factories.

SOIL MICROBIOLOGY STUDIES IN SOUTHEAST. (Science, July 31) During recent years there has been a revival of interest in soil microbiological investigations in the Southeast. The principal problem being investigated at the Alabama Experiment Station at present deals with the influence of biological activity on those qualities that affect the hydrologic aspects of soil and water conservation. In addition, some attention is being given to the nature of microbiological activities in "gall-spot" soils in comparison to those in nearby fertile areas. At the Kentucky Station research includes nitrogen balances as related to soil management, nitrogen fixation and disposal under continuous cropping of various legumes and of these legumes in association with bluegrass, and nitrogen excretion by legumes. The use of soil for the inoculation of vetch and cross-inoculation of the Rhizobia found on wild lespedeza are projects under investigation at the Mississippi Station.

Projects under way in North Carolina are nitrification studies in forest soils, possible control of plant pathogenic bacteria in soil by chemical means and microbial antagonisms in soil that may aid in control of plant pathogenic bacteria. Research under way at the Florida Station consists of the following projects: Types and distribution of microorganisms in Florida soils, the metabolism and functional relations of soil microorganisms under Florida conditions, the interrelationships of microorganisms in soil and cropping systems in Florida, and the factors affecting the growth of legume bacteria and nodule development. Further studies on microbial activity in relation to soil aggregation are in the process of completion in South Carolina and work is contemplated on the decompostion of organic matter, the rate of decompostion of lignin and hemicellulose, the relative value of mulches and incorporated organic matter and the nitrogen-fixing bacteria.

EGYPTIAN CONTROLS ON BREAD, SUGAR. (Foreign Commerce Weekly, July 25) Unless specially authorized, Egyptian bakers are forbidden to make or sell any bread except that prepared from wheat flour with all its constituent elements except bran; and to add, in the process of bread making, bran or flour of any cereal except wheat. Flour mills and flour merchants, unless specially authorized, are forbidden to extract or to keep any flour other than wheat flour with all its constituent elements except bran. The Egyptian Government has requisitioned the stocks of refined and unrefined sugar belonging to the Societe Generale des Sucreries et de la Raffinerie d'Egypte, as well as the entire future production of this company, which holds a monopoly in sugar production in Egypt.

NATION-WIDE INVENTORY TO BE MADE OF NEW COMMERCIAL MOTOR VEHICLES. (Victory, July 28) A country-wide inventory of new commercial motor vehicles was ordered by the WPB July 24 in an effort to tighten the rationing program that began March 9. A shortage of certain types of trucks and the increasing demands of Army and Navy make it imperative to determine the location and type of every new commercial vehicle in the country. The inventory will cover all types of new commercial motor vehicles, such as light, medium, and heavy trucks, truck trailers, ambulances, hearses, station wagons, off-the-highway vehicles, truck and bus chassis, and vehicles fitted with commercial pick-up devices.

DOODLE BUCK RAKE. (Successful Farming, August) Auto buck rakes made largely by farmers and local welders have helped Ohio farmers solve their hay-harvest labor problems. Studies covering many farms in that state prove that these machines require considerably less labor to the ton than the conventiona wagon-loader method and handle hay from the meadow to mow at a lower cost than any other method. Tractor buck rakes were not quite as efficient as the auto buck rake because of the slower speed of some of the older tractors, nor did tractor rakes haul as large loads.

SOYBEAN PROCESSING. (Farm Journal and Farmer's Wife, August) More soybeans than we have mills to handle--that's the talk of soybean processors. They expect the entire 1942 crop to reach 170,000,000 bushels, and assert that the combined capacity of soybean processing mills (operating 24 hours a day) is only a little over 100,000,000 bushels. Their suggestions for solving the problem include shipping soybeans for processing to Dixie's cottonseed mills; to the West Coast's idle copra mills; to Canada's linseed oil mills; and to England.

NEW BOTANICAL PERIODICAL. (Science, July 31) The Arnold Arboretum of Harvard University has issued the first number of a new periodical, Sargentia. This periodical is a continuation of the Contributions from the Arnold Arboretum (1932-38) and is named in honor of Charles Sprague Sargent, first director of the Arboretum. It is planned to publish Sargentia at irregular intervals, presenting papers in various botanical fields. Subscriptions and requests for information should be addressed to the Librarian, Arnold Arboretu Jamaica Plain, Mass.

CHEMICAL NITROGEN SUPPLIES. (The Fertilizer Review, April, May, June) Although supplies of chemical nitrogen for use as fertilizer during 1942-43 can be estimated only approximately at this time, the present prospect is that less fertilizer nitrogen will be available for 1942-43 than was used during 1941-42. This means that if limited supplies are to be distributed equitably, careful plans must be made and followed through the year. Those who have studied the nitrogen shortage problem agree that, in the main, the nitrogen assigned to mixed fertilizer can be distributed equitably and used most efficiently (1) by omitting chemical nitrogen from mixed fertilizers for nonessential uses such as lawns, golf courses, etc.; (2) by omitting chemical nitrogen from mixed fertilizers for use on fall-sown small grains, principally wheat of which there is a large surplus; (3) by scaling down the nitrogen content of complete fertilizers generally, in no case to less than 2 percent, however; and (4) by very definitely linking fertilizer grades and ratios to crops and soil areas.

If grades having a high nitrogen content are offered and sold in considerable tonnages, the limited nitrogen supply soon will be exhausted. The offering of high nitrogen grades, in view of the almost certain shortage of nitrogen for direct use, would almost inevitably reduce total tonnage. This would result in inequitable distribution and might even necessitate rationing to farmers on a card or ticket basis. This is what Federal agencies, State agricultural officials, and the industry are trying hard to avoid. A distinct advantage in reducing the nitrogen content of mixed fertilizers instead of producing fewer tons of mixed goods with a high nitrogen content is that the former would insure the use of normal applications of phosphate and potash both of which are expected to be available in normal or more than normal quantities. All chemical nitrogen except that taken by the War Department is being allocated by the War Production Board--that for fertilizer use on recommendations made by the United States Department of Agriculture, after consultation with the land-grant colleges. Fortunately, about 90 percent of the nitrogen needed to produce our crops comes from the soil and from the air, and some of our shortage of chemical nitrogen can be made up by growing more legumes and by making more efficient use of farm manures.

WOMEN OF AMERICAS KNIT GOOD-NEIGHBOR TIES. (Article by this title in Foreign Commerce Weekly, August 1) The growing economic isolation of the Western Hemisphere from the rest of the world since 1939 has developed the mutual dependence of American women for new ideas in clothing and household decorations. Difficulties of communication with Europe have forced North American women to look south and Latin American women to look north, for new fashions, interior designs, and artistic creations, where formerly the women of both North America and South America looked across the Atlantic for styles, household products, and luxuries. Not only are ideas and inspirations exchanged by designers and fashion experts of North and South America, but both continents are discovering within each other's confines new sources of materials for clothing and household furnishings. In Peru, North American retailers have found rugs of natural alpaca wool which can be sold very profitably in the United States. Peru also has a tree fiber which can be used in the manufacture of artificial flowers. Chile has good deposits of kaolin, an excellent basis for ceramic production. Uruguay and Argentina have a fairly well developed leather-goods industry which exports to the United States leather gloves, reptile leather goods, semimanufactured leathers, raw fur, and wool. One item, recently introduced into the United States with great

success, is an aluminum plate made of anodonized aluminum. These hand-made plates are manufactured by an English company formerly operating in France and Holland.

Throughout the United States, during the past year, Latin American exhibitions and fairs in department stores have become the fashion. The products of more than 300 Latin American factories--of special interest to women--were exhibited in New York last winter, including many reproduction of articles not obtainable in the United States. One retail house has estimated that there are over $50,000,000 worth of manufactured goods now in Latin America which are suitable for sale in the United States.

TRUCK TRANSPORTATION IN THE WAR. (The Fertilizer Review, April, May, June) We now have a pool of about 120,000 trucks--less than one-fifth of last year's consumption--available for allocation to purchasers, and this pool of trucks must serve our replacement need for the duration of the emergency. It behooves all of us in industry and in Government alike to bend every effort to the task of conserving and maintaining every truck which is now in use. The wartime burden of America highway transport facilities is unusually heavy. The movement of raw and partially processed materials and all the implements of modern warfare has increased the demand for more efficient truck use and better hauling methods. The increased demand for agricultural commodities for our own war effort and that of our Allies is also placing heavy burdens on our highway transport equipment. There are approximately 1,500,000 vehicles in the rural areas of our country that are employed by farmers and others in transporting farm products and commodities from farms to concentration points, markets, and distribution centers. These vehicles are owned and operated by 1,250,000 farmers and farm supply dealers. A program for the conservation of these vehicles and the vital materials used in their maintenance has been completed. Farmers are being urged to pool their transportation requirements and alternate the use of equipment, thus coming to town with fully loaded trucks and returning from town with payloads.

TRADE AGREEMENT BETWEEN U. S. AND URUGUAY. (Foreign Commerce Weekly, August 1) A trade agreement between the United States and Uruguay, signed at Montevideo on July 21, provides for reductions in the existing duties of each country on certain products imported from the other country, and for assurances against the imposition or increase of duties on certain other products. In addition, the agreement contains a reciprocal assurance of general unconditional and unlimited most-favored-nation treatment of each other's commerce in all respects, and special safeguards against the impairment of the trade benefits through import quotas, new internal taxes, or exchange control. No date has yet been set for bringing this agreement into operation.

In return for the assurance of continued duty-free admission into the United States of unmanufactured agates, dried blood, steamed or ground crude bones, bone dust, bone meal, and a number of other Uruguayan products, plus reductions in the present United States' import duties on flaxseed, certain prepared or preserved meats--principally canned corned beef--casein, bovine hides and skins, certain coarse wools, and other commodities. Uruguay is to grant reductions in duty on a broad range of American export products, industrial and agricultural, covering 81 tariff classifications, and assurance against the imposition or increase of import duties into Uruguay on an additional list of commodities covering 60 tariff classifications.

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The Daily Digest

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U.S.D.A. COMMITTEE ON POST-WAR PLANNING. (Editorial comment in Free World, August, regarding short article on this committee.) While the work of the planning committee of the Department of Agriculture is now only in the beginning and organizational stages, it is already performing an essential function. To proceed with democratic methods from the ground up, both in drawing forth and in putting into effect the ideas of the farmers, is no easy task to carry on under the pressures and daily transformations of war-time Washington. This emphasis on popular development of plans for the future and the simultaneous program of educating farmers in the field of their common interests with industrial workers are activities which will bear fruit in the coming time of decision. Only when this kind of planning is translated into continuous and prompt action can we hope for the enlightened attitude of men everywhere on which democracy depends.

In the case of the wheat agreement, although the document is concerned with but one commodity, it offers a blueprint of the manner in which each other commodity should be studied by the experts and officials of government so that similar international agreements, much broader in scope than this one on wheat, could be attained for each. The document should be studied in full by those interested in actual details of production control, stocks, export control, price control, the relief pool, and the council and executive committee set up to enforce the agreement. The preamble states a new international philosophy which is fully implemented by what follows, and that is a portent of a better world to come.

MEAT FOR THRIFTY MEALS. (New Farmers' Bulletin, No. 1908) This bulletin gives suggestions for selecting and cooking the cheaper cuts of beef, pork, lamb, and veal. Cheaper grades and cuts of meat, though fairly lean and not so tender, if prepared right are as full of food value and as tasty as higher-priced steaks and roasts. Chief difference is they take more time in cooking and more skill in seasoning. All kinds of lean meats provide body-building proteins, iron and some of the vitamins needed for good health. Even richer in iron and vitamins than the "muscle" meats are liver and other meat organs. (Available from Office of Information, U.S.D.A., Washington.)

DEFENSE OF THE FARMER: FSA PROGRAMS. New Republic for August 3 contains an article, In Defense of the Farmer; and a letter, Aid for Low-Income Farmers, discussing the Farm Security programs.

CANADA EXTENDS FERTILIZER AID. (Dominion Department of Agriculture, Ottawa, July 29) Fertilizer subventions subsidies first authorized in February, 1942, will be continued on a modified scale to December 31, 1943. The purpose of extending the policy is to assist in the production of increased supplies of meat, dairy and poultry products to meet the large commitments and increasing demands of the United Kingdom, by providing subventions for fertilizers applied to certain feed crops. The only fertilizers eligible for the subvention are the kinds and analyses recommended for use on the following feed crops. Pastures, hay grain, ensilage and green-feed crops, mangels and turnips. It is estimated that, due to the subventions last spring, at least 35 percent more fertilizers were used on the crops covered by the policy. It is hoped in the interests of food production, that this figure can be increased up to 50 percent during the coming year.

LEAF SPOT DISEASE OF WHEAT FOUND IN NEW YORK AND MARYLAND FIELDS. (Science Service Release, July 21.) Japanese fungi are attacking American wheat, though as yet not causing really serious damage. Presence of the fungi, which cause diseased spots on the grain leaves, is reported from western New York by M. F. Barrus of the New York State College of Agriculture, and from experimental plantings of the U. S. D. A. experiment station at Beltsville, Md., by A. G. Johnson. The disease was first detected in June, 1941, and the extent of its distribution suggests that it has been in this country for several years. The Plant Disease Survey is anxious to obtain further information about its occurence, and collaborators and cooperators are now on the lookout for it in other localities.

OCD APPOINTS COORDINATOR OF FOREST FIRE FIGHTERS SERVICE. (Victory, July 28) David P. Godwin, assistant chief of the fire control division, United States Forest Service, has been appointed national coordinator of the Forest Fire Fighters Service, recently established by the Office of Civilian Defense, OCD Director Landis has announced.

ARGENTINA MANUFACTURING CORN BRIQUETS. (Foreign Commerce Weekly, August 1.) Argentina's Y. P. F. (State Oil Company) has begun the manufacture of corn briquets for domestic and industrial fuel uses, according to advices from that country. Manufacture of the briquets is expected to use much of the large corn surplus, in addition to replacing dwindling coal imports. Corn briquets will also be used in conjunction with coal for burning in the locomotives on the principal railways. In addition, large amounts of alcohol are to be distilled from corn, chiefly to be mixed with gasoline for motor-vehicle consumption.

STANDARDS BUREAU DEVELOPS WOOL THAT RESISTS MOTHS, SOAP ALKALIS. (Science Service release, July 22) Chemically "toughened" wool, indigestible to moths and resistant to soap alkalis, has been developed at the National Bureau of Standards by research associates of the Textile Foundation. The "toughening", however, is all inside the wool, for the fibers remain just as soft and pliable as ever. Secret of the process, lies in a rearrangement of sulfur atoms in the chemical composition of the wool substance. In natural wool, the sulfur tie-up is the first thing attacked by the digestive juices of the moths' stomachs, also by the soap alkalis. By making these sulfur structures more stable the whole wool molecule is made more resistant to any kind of chemical attack.

RESEARCH IN INDUSTRY.(Science, July 31) Influence of the availability of scientists for industry is interestingly illustrated in the chemical industry in Germany. In the early nineteen-hundreds the German universitites turned out many more trained chemists than could find employment in teaching. These sought employment in industry, where great numbers were put to work in organized industrial research. The results of their efforts contributed to the tremendous technical advantage of Germany prior to the first World War, particularly in the field of organic chemistry. Since then the tables have turned, and the advantage in industrial research even in this special line is no longer with Germany. Nazi domination has stultified her science and has diverted its aims to the destruction of man rather than to his welfare. She has forced the rest of us to divert our aims in industrial research to her own destruction. Today, our great laboratories are engaged almost wholly in devising tools to destroy the anti-social, anti-scientific forces that threaten to stop the progress of scientific endeavor throughout the world.

FATS SALVAGE CAMPAIGN.(Butchers' Advocate, July 29) WPB Conservation Division officials estimate that over 2,000,000,000 pounds of household fats are thrown away every year. The Government hopes to have each housewife salvage from her kitchen between one and two pounds of fats a month. This will more than make up the loss inflicted upon us by the Japanese. Housewives are being told how to collect and prepare the drippings from the grill and the roaster, and the grease in the frying pan, and where to dispose of them. Meat markets will buy millions of pounds of waste kitchen fats from America's housewives and store the fats in their refrigerators until they can be collected by the renderers. From the renderers the fats go to the manufacturers to become part of numerous items essential to military and civilian use.

LOOKS, SMELLS, TASTES LIKE COFFEE - MADE OF BARLEY -- (N.Y. Times, August 4) -- It looks like coffee, it smells like coffee, it even tastes like coffee -- but it isn't coffee! The newest beverage in New York is made of roasted barley malt, and it doesn't keep you awake. This delightful new brew appears precisely in the nick of time. For it offers a cheery solution not only to the demi-tasse addict but also to the lady of the house, who needs must cope with shortages and restrictions of the great American beverage. The new drink -- guaranteed to be free from all caffeine and theine -- may be served both hot and cold, to adult and child, and also may be combined with genuine coffee to make a single jar of the real commodity go twice as far. It is made in exactly the same manner as coffee -- by drip, percolator or silex -- and even the same measurements may be used, one tablespoon to a cup producing a good, savory brew.

POULTRY: VICTORY FOOD SPECIAL (Butchers' Advocate, July 29) So important a personage as the Agricultural Marketing Administrator says? "It is a patriotic duty to eat chicken this summer." An abundance of poultry is expected because of the stepped up production of eggs for export to the United Nations. There will be increasing

opportunities for meat dealers this year in the sales of poultry. In a very short time poultry will flow in greater quantities into the market, and meat dealers will have plenty to stock up their refrigerators.

NEW BRAZILIAN BANK TO FINANCE RUBBER. (Foreign Commerce Weekly, August 1) On July 10 a decree-law was signed by the President of Brazil establishing a new bank for financing rubber operations. The new rubber organization will have as its purpose the furthering of the Washington Accord of March 3, 1941, which was signed by the Brazilian Government and the Rubber Reserve Company. The Banco de Credito da Borracha, as the new organization is called, will have its head office in Belem, in the State of Para, and it will have the power to establish branches within and outside Brazil. The bank has a charter for 20 years. It will make loans to rubber planters for purchasing the necessary machinery, for development of transport between the various centers, and for sanitation and colonization. It will have exclusive right of purchase and sale of rubber.

HAY FIRES (Article by this title in Successful Farming, August) Fire today is a deadly, ruinous thing. It has always been a serious farm problem - there aren't many hook-and-ladders or water plugs along the routes - but fire is more serious right now than it has ever been because you have more to lose! Livestock at parity plus prices, dairy herds huffing and puffing to meet Uncle Sam's increased production quotas, and irreplaceable equipment made of steel and rubber - it's tough to see them go up in smoke.

There are many causes of destructive fires, of course, Hay fires due to spontaneous combustion aren't the commonest type of fire; neither are they the most dangerous to human life. But they are the most treacherous, hardest-to-trace-and-prevent kind of fire there is. A recent Iowa study shows that fires resulting from common, everyday fire hazards (bad shingles, leaky chimneys, and so on) have decreased remarkably in the last 10 years, but spontaneous combustion is on the upgrade.

LAND AND WATER AREAS OF THE U.S. (Science, July 31) The Bureau of the Census has just sent to press a publication which provides the first basic remeasurement of the land and water area of the states and counties of the United States to be released since 1881. In addition, for the first time, land and water areas are given for each of the 50,000 civil divisions of the counties, a fact which will provide a per-square-mile density basis for census statistics possessing sixteen times the refinement of comparable county densities. This publication, the product of five years of planning and measurement, employed procedures approved in conferences with the U.S. Coast and Geodetic Survey, the U.S. Geological Survey and the General Land Office. Greatly improved maps make it possible to undertake these remeasurements. A basic contribution to area measurement is provided by adequate definitions of land and water and a system for establishing the outer limits of the United States.

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The Daily Digest

Prepared by the Press Service for the use of USDA employees. Views and opinions in these items are not necessarily approved by the Department of Agriculture.

Washington, D. C., August 6, 1942

WEEKLY WEATHER AND CROP BULLETIN, August 5: In northern States harvest of late small-grain crops and general threshing in interior valleys have been delayed by frequent showers. In the western Winter Wheat Belt threshing made good progress and returns continue unusually large. In the southeastern Spring Wheat Belt, where harvest is in progress, dry weather is needed. Cutting has begun in the Red River Valley of Minnesota and the bulk of spring wheat has been harvested in eastern South Dakota. Showers and cool weather favored development in North Dakota and Montana, although some lodging is reported from rain and wind. Spring wheat shows improvement in much of Montana and harvest is beginning in southern North Dakota. In the Pacific Northwest excellent harvest weather prevailed.

Except in some southwestern sections, good corn growing weather prevailed. Temperatures were high and showers beneficial in most of the central and eastern portions of the principal Corn Belt, and also in much of the Atlantic area. In a limited portion of the western Ohio Valley, principally western Kentucky and southern portions of Indiana and Illinois, the crop made poor progress because of dryness, but in other parts of the Valley showers were helpful. Parts of Indiana are infested badly by borers.

While rain would be helpful in parts of the Cotton Belt, especially some central and western districts, weather continued favorable, especially for checking weevils. In the eastern States of the belt, progress continues satisfactory. In the northeastern belt the crop is well advanced.

Pastures need rain in the Carolinas, Southeast, and many areas from Missouri southwestward. Showers were locally beneficial in New Mexico and Arizona, but rain is generally needed. Ranges and pastures continue in good to excellent shape in most northern districts. Haying made good progress in central valley sections, though there was local rain damage in the eastern Ohio and upper Mississippi Valleys. Livestock are generally thriving, with only local loss of weight in the eastern Great Basin.

MEN'S "STRAW" HATS OF COTTON -- (N. Y. Times, August 5) -- Men's summer hat lines for next season, now being introduced to the trade, include many numbers woven of cotton yarns which are processed to simulate straws which the industry formerly imported from the Far East. One of the distinct advantages the cotton "straws" have over the natural material is that breakage is reduced. The development of new machines makes it possible to cut yard goods into crowns and brims and then sew them together. Manufacturers also point out that the cotton yarns lend themselves to braids, which have been popular in recent seasons. The bulk of the yarns used in the hats are generally employed in the weaving of drapery and upholstery fabrics. Hat manufacturerspurchase the yarns in the gray and process them for stiffening and dyeing.

MENTAL HYGIENE PROGRAM SUCCESSFUL IN RURAL AREA, . (Science Service release, July 25) Prevention of crime and delinquency, successful treatment of "problem" and backward school children and the early detection and prevention of serious mental disorders have resulted from the pioneer work of the Suffolk County Health Department of New York, in setting up a mental hygiene program for rural areas. An encouraging report of its first year's work is given by Dr. George M. Lott, Director of the Suffolk County Mental Hygiene Division, the first of its kind to be organized by a county health department. Dr. Lott's report appears in Public Health Reports of the U. S. Public Health Service.

GROWTH STIMULATION OF PEAS BY FUNGICIDAL SEED PROTECTANT.. (Science, July 31) The first strictly organic, non-metallic compound to show much promise as a plant protectant against fungous diseases was tetrachloro-para-benzoquinone. In field tests made on pea seed during the past three years, it has very effectively prevented seed decay by soil-inhabiting fungi and has usually induced better yields than metallic compounds of equal fungicidal potency. In tests made under conditions where there was no seed decay, it was the only treatment that increased the yields. The plants from pea seed treated with tetrachloro-para-benzoquinone yielded 9 to 22 percent more than untreated controls. These data obtained under controlled conditions explain the results obtained under field conditions. It is not known how many species of plant will give the same response to tetrachloro-para-benzoquinone as peas. There is evidence from field observations that lima beans and sweet potatoes may be stimulated. These observations on growth stimulation are of fundamental significance, since they reveal a promising new field of study into fungicides. -New York Experiment Station, Geneva.

NEW BOOKS ON AGRICULTURE. (The Fertilizer Review, April, May, June) English Farming. By Sir E. John Russell. William Collins, London. 1942. Sir John Russell, director, Rothamsted Experimental Station in England, is well-known to American agriculture. This book has 12 color plates and 22 black-and-white illustrations. It is one of a series entitled, "The British Commonwealth in Pictures." It emphasizes the importance of British farming in both peace and war....Food Production in Western Europe. By P. Lamartine Yates, with foreword by Sir William Beveridge. Longmans, Green and Co., London, New York and Toronto. This book presents a comprehensive account of food production in western Europe, including Denmark, the Netherlands, Belgium, France, Switzerland, and Germany. The first edition appeared in 1940 and at an especially appropriate time considering the international complexity of wartime food problems. It describes the farming systems and deals with a whole range of problems such as land tenure, indebtedness, cooperation, marketing, mechanization, and the rural migration. It gives comparisons of prices received for produce by farmers in Britain and on the continent, and discusses the standard of living experienced by peasant population.

VALIANT PEACH. (Successful Farming, August) This is a new variety which horticulturists in the peach sections consider promising. A seedling introduced from Ontario, Canada, it is an Elberta type, more globular in shape than Elberta, two weeks earlier, and carrying more color and superior quality. Minnesota plant breeders are making a strong bid for a new peach which will be consistently hardy in the northern states. During the past winter several trees at the Minnesota state fruit-breeding farm which came through 17-below-zero weather the previous winter fruited up to 150 peaches each, some with high flavor and color. If the best of these peach trees prove that they can go through 30 degrees of sub-zero temperature, fruit breeders will approve them for introduction.

INDIAN JUTE FOR AMAZON VALLEY? (Foreign Commerce Weekly, August 1) Efforts to establish the cultivation of Indian jute in the Amazon Valley are now meeting with success, according to advices from Brazil. No other known fiber is quite equal to jute for the bagging, sacking, and baling material needed in the cotton industry of the United States and in the coffee industry of the American Republics. The great plain extending along both sides of the Amazon River, periodically flooded by heavy rains, should lend itself to the cultivation of this fiber, says the Office of the Coordinator of Inter-American Affairs.

CHICAGO EXCHANGE MAKES BOXED BUTTER THE BASIC PACKAGE. (American Butter Review, July) Chicago, Ill.--The wooden tub as a bulk butter container gave way to solid-packed boxes in July, as the pardelivery package in spot trading on the Chicago Mercantile Exchange daily call. Recently amended cash call rules of the exchange provide that on sales of butter packed in fiber or corrugated boxes, substitution of butter in tubs shall be permitted at a premium of 1/4¢ a pound. When tub butter is sold on the spot call, butter in boxes is deliverable at an equal discount. Heretofore, substitution of butter in fibre boxes on sales in tubs was at a penalty of 1/2¢ a pound. The new rulings making boxed butter the main trading basis emphasize the fact that the greater part--some observers say 80 to 85 percent--of the market supply of the product now arrives at terminal points in the lighter, less expensive package.

AGRICULTURE'S BIGGEST JOB. (Extension Service Review, July) We are on the last lap of delivering to representatives of the United Nations the first billion dollars' worth of food and other agricultural commodities for lend-lease shipment. When that figure is reached, we shall have supplied enough farm products, most of them in highly concentrated form, to fill a single train of freight cars stretching three-fifths of the way across the country for a distance of approximately 1,800 miles. Because of the necessary lag between buying and shipping, as well as the wartime difficulties of ocean transportation, the total volume of farm commodities bought by the Department through the Agricultural Marketing Administration has been running about twice the amount actually delivered at shipside to United Nations representatives. With every improvement in the ocean shipping situation, more and more of these products can move across the seas to meet the urgent requirements of our allies and build their fighting strength.

CANADIAN CIVILIAN WOOL GREATLY RESTRICTED. (Canadian Textile Journal, July 31) Severe curtailment of new wool consumption in civilian goods in Canada is expected in the next rationing period starting October 1. Heavy arrivals of wool from primary markets in the past three months are being utilized to expand the stock pile in this country and provide adequate supplies of raw materials for military purposes. Mills have been instructed to increase their use of substitutes such as rayon staple fibre, rayon waste, and reworked wool and shoddy. Consumption of new wool in civilian goods in the period April 1 to September 30, 1942, is already reduced 30 to 50 percent below 1941 levels. While wool is arriving in large quantites from Australasia, the shipping situation remains acute, and expansion of the wool stock pile in Canada is imperative.

NYLON FLEECE. (Business Week, August 1) Made from the waste leftovers of war production, nylon fleece is a natural for many items, notably, men's, women's, and children's coats and bathrobes, and all kinds of blankets. Government restrictions on the use of wool now imperil the supply of quality merchandise in these lines. Nylon fleece already is getting heavy promotion in women's and children's coats. Around 500 top-notch department stores and specialty shops across the country are pushing these. Some have also introduced the new fabric in yards goods departments. Before fall, it probably will turn up in men's and boys' topcoats, blankets (particularly football blankets), gloves, hats and bathrobes.

Claims made for nylon fleece are that it is moth proof, water and stain repellent, warm in winter, cool in summer, wear-resistant. In appearance, nylon fleece resembles a good-quality camel's hair fleece. Significantly, the fabric will take practically any dye. The biggest drawback to nylon yarn has been the difficulty of making it take, and hold, a bright color. The new material wholesales for $3.85 a yard, retails for around $7. Women's coats of the fleece are now retailing for around $45 and $50. This is comparable to the price of a good wool coat, cheaper than a top-quality camel's hair. There's apparently going to be enough fleece to supply civilian demand (within the relatively high price range in which it is now sold).

ANALYSIS OF SUPERPHOSPHATE PRODUCTION. (The American Fertilizer, July 18) In 1941 the fertilizer industry was confronted by circumstances which threatened seriously to interfere with the production of adequate supplies of phosphate fertilizer in the United States. These circumstances comprised mainly (1) dislocations and local shortages of supplies of sulphuric acid, occasioned largely by the great expansion in the manufacture of military explosives, (2) shortage of electric power for the manufacture of elemental phosphorus and the diversion of elemental phosphorus from fertilizer production to military uses, (3) shortage of boats for the transport of phosphate rock and sulphur, and (4) the exportation of substantial quantities of concentrated superphosphate under the lend-lease program.

As the formulation of plans to meet this situation required more information on the phosphate fertilizer industry than was available from accessible sources, the Office for Agricultural Defense Relations (now the Office for Agricultural War Relations) Department of Agriculture, asked the National Fertilizer Association to request certain information from all the producers of ordinary superphosphate and wet-mixed base. This was done, and the data, including information on production, productive capacity, storage capacity, grades of run-of-pile materials produced, types and grades of phosphate rock used, method of transporting rock from mine to plant, and sources of sulphuric acid, were obtained for every superphosphate plant in the United States. It is believed this is the first time complete information on these matters has been assembled. Because of the great importance of ordinary superphosphate as a fertilizer material, the data should be of considerable interest and value to the fertilizer and allied industries as well as to agencies and individuals concerned with crop production and the maintenance of soil fertility.

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The Daily Digest

Washington D. C., August 7, 1942

PERMITS ORDERED FOR GRAIN SHIPMENTS. (War Letter for Agriculture, August 3) Grain for storage at terminal markets can be shipped by rail henceforth only upon permit from the Interstate Commerce Commission under a new order designed to provide priority in transportation and to prevent the tying up of freight cars at markets. Movement of "cash grain" also will be by permit on the basis of "moving grain in the gravest danger of damage or loss" and thereafter on the basis of "a fair and equitable proration of the facilities available at the market."

An ICC representative to handle permits has been designated at the following centers: Buffalo, Chicago, Omaha, Kansas City, St. Louis, and Minneapolis. Permits are to be issued upon application by a shipper, receiver, buyer, or his authorized representative, to the grain permit committee for each particular area; these committees have been set up throughout the country and include a member from the USDA, the designated ICC agent (at the six points cited) and representatives of the producers, grain trade, processors, transportation, and other interests.

NEW N.Y.C. POULTRY TERMINAL. (American Egg & Poultry Review, July) The New York City Live Poultry Terminal, in Long Island City, Borough of Queens, is open for business. For many years a central terminal for the handling of rail and truck live poultry has been urged for New York City by leading elements of the local trade as well as producers and shippers. All live poultry for consumption in the City of New York must be inspected at the new terminal. All poultry dealers and their vehicles must be licensed, and the trading of poultry on grade is also required. One of the greatest assets of the terminal is its accessibility to motor truck routes in New York State, New Jersey, Pennsylvania and New England.

REFRIGERATION EQUIPMENT FOR MERCHANT SHIPS. (Article by this title in Refrigerating Engineering, July) In 1938 the merchant fleet of this country consisted of about 1400 ships of about 8,000,000 gross tons. Of these ships only 82 were equipped to handle refrigerated cargo. Since that time the Maritime Commission has undertaken to construct approximately 150 ships equipped for refrigerated cargo. Most of these ships will have but one refrigerated hold. Fifteen of the ships have from three to five completely refrigerated holds. In all, there will be about 11,500,000 cu. ft. gross of refrigerated space provided by the new ships. Exports of refrigerated cargo from the west coast in 1938 amounted to about 1,500,000 tons, or about 21 percent of the total export. This represented an increase of 100 percent over the refrigerated exports for 1928. In 1920 the apple export trade in this country amounted to about 100,000 boxes. In the late thirties this figure had reached nearly 5,000,000 boxes. These figures should give some

idea of the increasing need for refrigerated cargo space. Up until now most of this cargo has been carried in foreign bottoms, largely because of the lack of refrigerated capactiy in our own merchant marine. It is expected that in post-war trade the ever increasing demand for quick frozen meats, vegetables and other refrigerated products will make it necessary to provide an even larger percentage of refrigerated space in our merchant fleet.

"TWO FRIED EGGS ON THE SAME PLATE!" (The Southern Planter, August) What we in this country accept as an everyday food item may be a luxury in some of the foreign countries whose brave soldiers and sailors have thus far borne the brunt of battle against the ruthless Nazi war machine. A British sailor was asked in New York recently what he had seen on Broadway that appealed most to him. "Two fried eggs on the same plate!" was his reply. Eggs are rare in England. Before the war, Great Britain imported 60 percent of the world egg trade. She took 60 percent of the total production of the Netherlands and Poland, and 70 percent of Denmark's huge output. All of these eggs are now going to Germany. The British are looking to the American hen to produce eggs for the armed forces and provide, if possible, a few extra dozens for the civilian population. Fighting men and workers in war industries, at home and abroad, must have vitamin rich foods to assure victory. The egg is the nearest approach to a balanced meal in the original package. We must have more eggs this fall and winter. And that means more pullets housed, better pullets, better fed and managed.

UNSHRINKABLE WOOL EXPERIMENTS. (Canadian Textile Journal, July 31) After many years of research in Australia, definite success has been attained in the important matter of rendering woollen goods unshrinkable, according to Frederick Palmer, Canadian Trade Commissioner in Australia, writing in the Commercial Intelligence Journal. The Australian Wool Board showed interest in the introduction of the latest British methods into Australia, and the International Wool Secretariat, after exhaustive tests, pronounced in favour of the Woolindras process. The Australian Council for Scientific and Industrial Research conducted tests of various processes, several of which were found to be effective. The Freney-Lipson process convinced experts that it would solve the problem, and it is claimed the process is as effective as and cheaper than the British processes.

DEHYDRATORS' TOP RANK. (Business Week, August 1) Capacity of the dehydrating industry will be sharply increased if dehydrators can collect the critical metals and electric motors on which the War Production Board has now granted an AA3 rating. The materials are to be used in dehydrating an additional 84,293,000 lb. of spray process milk, 110,242,000 lb. of eggs, 66,189,000 lb. of vegetables, and 60,000,000 lb. of meat during the next 12 months. Wherever possible the increased capacity will be allotted to producers who are now dehydrating the products slated for expansion.

Production of dry skim milk for human consumption in 1941 was 365,984,000 lb., for animal consumption 110,028,000 lb. Production of dried whole milk (for which the British are particularly eager) was 47,483,000 lb. Largely under the impact of lend-lease demands production of skim milk for human beings in the first five months of 1942 was up 58%, for animal feed down 57%, and dried whole milk, mostly for human consumption, was up 12%.

JERSEY FARMERS TURN TO RAILROADS. (The Produce Guide, August 1) Farmers in New Jersey will have to depend on the railroads to move their produce to market more than in recent years, Warren W. Oley, chief of the State Agriculture Department's Bureau of Markets, told a meeting of State Grange and Farm Bureau officials and representatives of the Extension Service and the New Jersey College of Agriculture. The meeting was held to map plans for improving distribution of fresh fruits and vegetables during the war emergency. Mr. Oley said growers must shift more and more to rail carriers from trucks, which until now have moved more than 90 percent of all fresh fruits and vegetables grown in the State, and from boats, which also have moved substantial tonnages.

NEED OLD FURS. (The American National Fur & Market Journal, August) Manufacturers, retailers, storage companies and others have been asked by Marcus Silverberg, executive director of War Emergency Board of the fur industry, to supply discarded short haired furs, which are still usable, for the sailors' vest project committee of the WEB. He also urged retailers to seek the cooperation of their customers. The project is housed at 135 W. 26th St., N.Y.C. Union workers will make the vests in spare time without cost on machines loaned by a fur machinery corporation.

MINNESOTA BUTTER-SCORING METHOD. (Dairy Record, July 29) That new method of scoring butter utilized by the Minnesota Department of Agriculture is a vast improvement over the old plan. The new system takes into consideration the chemical composition, the sanitation aspects and the keeping quality, as well as the commercial score of the butter. Of course it would be better if a sample of the daily make of the creamery were scored but, even so, it is a decided improvement over the outmoded method used in most contests. Once butter buyers become fully acquainted with the method, they are going to revise their ideas considerably as to the creameries which are making the kind of butter they want. Some creamery operators, too, are going to have a different conception of the kind of work they and their farmers are doing.

MILK FOR CHEESE DIVERTED TO CASEIN. (American Butter Review, July) Wauken, Iowa--According to recent reports, the ingenuity of cheese plant operators have come to the fore when the cheese market was glutted with goods which could not be sold to the government. Some cheese factories are said to be continuing to operate, but do not make cheese. They buy the whole milk from farmers as formerly, but skim the cream and ship it to a creamery where it is made into butter. Casein is then made from the skimmed milk and is reserved for government priority materials.

CHEAPER CLOTHING IN BRITAIN. (Canadian Textile Journal, July 31) Due to the removal of the purchase tax on utility clothing in Great Britain, according to news dispatches, the Board of Trade has announced that new and lower ceiling prices on clothing, shoes and household textiles came into effect August 3. Prices will be reduced the full amount of the tax, that is, 10 and 12 percent. The prices of non-utility types of clothing were stabilized June 30 with profit margins somewhat higher than on utility goods.

FOOD DEHYDRATION EQUIPMENT GETS HIGH PRIORITY. (War Letter for Agriculture, August 3) Material to expand production facilities for dehydrated foods has been given a high priority rating by the WPB upon recommendation of the Foods Requirements Committee in order to increase the output of such foods for the armed services and for lend-lease. This includes new capacity for dehydrating meat and additional facilities for milk, eggs, and vegetables. The additional equipment is expected to provide, during the last half of this year and the first six months of 1943, the following additional dehydrated food products: 84,293,000 pounds of spray process milk; 110,242,000 pounds of eggs; 66,189,000 pounds of vegetables; and 60,000,000 pounds of meat.

Dehydrated meat occupies roughly about one-third the volume and weighs one-fourth as much as raw lean meat. Vegetables vary, but generally the reduction in weight results in about 10 pounds of fresh vegetables equaling one pound of the dehydrated product and requiring from 10 to 15 percent of the shipping space. Dehydrated eggs occupy about one-fourth the space of fresh eggs and weigh about a fifth as much. Dried whole milk requires about one-tenth the space of fresh milk and weighs about one-eighth of the original product. Vegetables to be dehydrated are potatoes, onions, carrots, beets, sweetpotatoes, and cabbage.

WILL BUILD "BANANA" ROAD. (The Produce Guide, August 1) Hopes for increased deliveries of bananas to the United States in the near future rose with word from Washington that this country would speed construction of a "pioneer" road from the southern border of Mexico to Panama. The new roadway, following the route which later will become the Inter-American highway, will extend for 625 miles, linking the unfinished parts of the projected highway, of which 1,000 miles have been completed. All arrangements have been made with Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica and Panama. Surveying is under way, with construction to begin soon. This government will pay all the costs. The purpose is to increase trade with the Central American republics.

BRIDGE TO LINK U. S. WITH CENTRAL AMERICA. (Foreign Commerce Weekly, August 1) A railroad bridge across the Suchiate river, connecting the railway systems of Mexico and Guatemala, is now being constructed. Mexican engineers in charge of construction expect the bridge to be open for service not later than September 1. The bridge will facilitate passenger and freight traffic and is expected to serve as a transportation link between Central America and the United States.

CANADIAN BUTTER SUBSIDY. (Dairy Record, July 29) According to the Canadian Dairy News Letter, the war-time prices and trade board has made effective a producer subsidy of 6¢ per pound of butterfat equivalent to 5¢ per pound of creamery butter, for the purpose of stimulating production and averting a threatened shortage of butter next winter. The campaign will be carried on in the hope of prevailing upon producers to expand production.

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The Daily Digest

Prepared by the Press Service for the use of USDA employees. Views and opinions in these items are not necessarily approved by the Department of Agriculture.

Washington, D. C., August 10, 1942

GIVE FARMERS TOOLS FOR FfF. (Editorial in Country Gentleman, August) In speeches to farmers the production of food is called the second line in our war effort. Then its equipment certainly is a war essential. The fact is that we cannot concentrate all of our materials and attention on one phase of the war effort and neglect others that are also essential to victory. Germany, at the start of its war drive, diverted everything to armament. Now, according to an official report from our own Government sources, the Nazis are emphasizing that "concentration on the output of agricultural equipment is second in importance only to armament production." The President has set up a Foods Requirements Committee. Its duties are to determine the amount of food and farm raw material supplies needed and how they shall be apportioned. Also, "to make recommendations to the Civilian Requirements Committee of the War Production Board as to requirements of supplies or equipment needed for the production of such foods and supplies." The committee has been assigned the facilities of the Department of Agriculture to get the facts. The Department is understood to be getting them as to farmers' needs of implements and machinery for next year.

The recommendations of the committee and the allotment of materials for the 1943 manufacture of farm implements and machinery should be in line with the needs disclosed. If the committee is to be held responsible for producing the food, it should have influence enough to see that the necessary equipment is supplied. Farmers are patriotic. The long hours of work they are putting in and their heavy purchases of War Savings Bonds are ample evidence. They are prepared for a rationing of tools that will take care of only absolute needs. But they must have understanding policies and the equipment necessary to enable them to do the huge job asked of them. Given these things they will do it.

WAR AND FARM WORK (Miscellaneous Publication 492, available from Office of Information, USDA, Washington, D. C.) This publication has been prepared from State college publications and from suggestions contributed by farm-management specialists of the Bureau of Agricultural Economics. It represents a first step in streamlining our farm jobs to the war. Used in conjunction with a series of reports now being prepared on monthly labor requirements by States, it should aid materially in taking care of farm-labor shortages.

VAPOR SOFTENS PAINT BRUSHES. (Science News Letter, August 8) Old stiff paint brushes can be softened in the vapor of a new paint solvent. This is a radical departure from the old method of soaking, and saves solvent. The brushes are suspended above the solvent in a closed can. Good bristles are scarce, so save your old brushes.

MICROFILM SPEEDS EXCHANGE OF SCIENTIFIC DATA BETWEEN BRITAIN AND U.S. (Science Service release, August 1) Scientific information and documents are being sent back and forth across the Atlantic in the form of microfilm in order to speed the mutual war effort of Britain and the United States, says A. V. Hill, secretary of the British Royal Society. Regular scientific collaboration between American and British scientists has now been arranged with liaison officers in both capitals and other research centers. Experts are also ferried by air from one country to the other. Travel and communication is still too slow to suit Prof. Hill, who says that "great difficulty is still experienced from slowness of travel and transmission of scientific people and information."

SCIENTISTS POOL KNOWLEDGE, REPORT TO WPB. (Science News Letter, August 8) Scientists of the United States are making their knowledge and experience available for the war effort through committees of the National Research Council of the National Academy of Sciences. A great stock of information already in existence has been thus pooled, and has been placed on record in well over a hundred reports furnished to the War Production Board and its predecessor organizations. Directions which new research should take have also been indicated. Especially important has been the work of the Metals and Minerals Advisory Committee.

SCIENTIFIC MANPOWER PRODUCTION. (Science, August 7) In recent numbers of Science there have appeared communications which manifest the growing demand for complete utilization of scientifically trained personnel. Through the facilities provided by the National Roster of Scientific and Specialized Personnel studies of the problems associated with utilization and assignment have been and are being studied and allocattions are being made in various fields of science. The roster is not simply an organized card file; it is proceeding as rapidly as possible in determining needs and allocating supply.

The problem it is considering at present is the mechanism by which we can supplement dwindling reserves in scientifically trained men. The process of robbing the universities to supply technically trained manpower has been carried to dangerous limits which, if pursued further, will result in the elimination of the future supply. The war has now progressed a sufficient length of time for us to realize that temporary expedients are not sufficient and that a long-range view will be necessary for the continuous replacement of scientific personnel which must be accomplished if we are to win this war.

NURSERYMEN TRADE BARRIER REPORT. (Florists Exchange and Horticultural Trade World / August 8) The Trade Barriers Committee of the American Association of Nurserymen reports that as a result of cooperation with the national and four regional plant boards, and with state regulatory officials: (1) Twenty-six states now have authority to enter into reciprocal agreements with the officials of other states, pertaining to fees and in some cases to other matters. (2) Only two states remain that require a surety bond of out-of-stat concerns. (3) Only eight states left with a requirement for special state tags on incoming shipments of nursery stock. Two of these states are not

enforcing this requirement. (4) Only four states left requiring duplicate invoices; in one of these, this requirement is not being enforced. (5) Agents fees are all tending toward $1. Only five states have higher agents' fees; 29 have no agents' fees.

COTTON SOCKS, RAYONS PREDICTED FOR HOSIERY. (Science News Letter, August 8) Next winter, according to expert opinion, the average woman's stockings will be mostly cotton socks (ankle, calf and knee-length), relieved by service-weight rayons. If she has anything sheer to dress up in, it will be what she has saved out of present supplies. Last year's silk shortage was solved by revoluntionary improvements resulting in high-grade sheer rayon hosiery and lace and net designs in full-fashioned cotton. But this year's problem is not only the disappearance of silk and nylon, but of any yarn with sufficient strength and elasticity to produce sheer hose. High-tenacity rayon is needed for supply-parachutes and tires; summer uniforms, underwear, and fine broadcloth service shirts absorb the long-staple cottons that were used for full-fashioned hose. And what Uncle Sam doesn't need, our allies do.

VICTORY GARDEN HARVEST SHOWS. (Florists Exchange and Horticultural Trade World, August 1) Members of the American Association of Nurserymen have agreed to support Victory Garden Harvest Shows with a fund of $10,000 obtained by voluntary assessment. The $10,000 is to be divided for three purposes. A sum of $3,500 is allocated to the office of the National Council handling the promotional work of the shows. Another $3,000 is allocated for educational exhibits at these shows in demonstrations of canning fruit and vegetables and dehydrating of such products. The remaining $3,500 is to be used for underwriting some of the expenses connected with promoting shows this fall in 15 large cities, classed as key cities in different states.

TO SALVAGE "OVER-SPRAY" OF PAINT. (Science, August 7) Manufacturers of war equipment have been asked by the War Production Board to start immediate programs for salvage of the "over-spray" of the paint spraying process, from which 100,000,000 pounds of essential chemicals can be recovered, according to estimates of the Chemical and Textile Units of the WPB Conservation Division, based on a nation-wide salvage survey of the paint situation. Army tanks, trucks, jeeps, and other military machines must be mass spray-painted with the familiar olive drab. Millions of shells must have a protective coat of nitrocellulose lacquer enamel. It is estimated that about 30 percent of the materials used can be recovered from the sludge of the over-spray. Pigments, glycerine, oils, resins, gums, chlorinated rubber, cellulose and plasticizers are some of the materials that can be recovered by tried and tested methods, and the cost of the painting can also be reduced.

CURTAILMENT OF LONG DISTANCE TELEPHONE CALLS. (Memorandum No. 965, Supplement No. 1, Office of the Secretary) The Chairman of the Board of War Communications has addressed the following memorandum to the heads of all Government Agencies:

"The Board has been advised that there has been a noticeable increase in the time required to complete long distance telephone calls. These delays sometimes run as high as six hours or more....The cause for the delay in most cases is lack of sufficient circuit facilities brought about by the rapid increase in the number of long distance calls. "It is urgently requested that, every .../effort be made to reduce the number and duration of long distance telephone

calls to a minimum and to utilize the mails and the telegraph facilities whenever practicable. If it is absolutely necessary to telephone, it will help the war effort if such calls as practicable are placed during the off-peak periods, i.e., between 12:00 noon and 2:00 p.m., between 5:00 p.m. and 7:00 p.m., and between 9:00 p.m. and 9:00 a.m., local time."

Country Gentleman

ICE-COOLED APPLES. / (August) Cooling apples with ice is one solution to wartime restrictions on mechanical refrigeration. Experiments by Purdue University Experiment Station have led to the development of a cabinet type of bunker to hold broken chunks of ice over which salt is scattered at the rate of 2 percent by weight. Air is circulated through this cabinet containin the ice and salt mixture by an electric ventilating fan, which also distribute the cooled air to all parts of the storage.

Even in southern Indiana, where outside temperatures of 70° to 90° F. are common during the first three or four weeks of the storage season beginnin about September first, it is possible to hold a temperature 18° to 22° below that of a room cooled by ventilation alone. The seasonal cost per bushel for using ice runs from 16 to 20 cents, including the cost of ice, salt, electricity, and overhead charges. Station Bulletin No. 379 gives detailed information on building an ice bunker of the type described.

FAST-GROWING CHINESE ELM SHOWS UP WELL IN TESTS. (Science News Letter, August 8) Wood of the fast-growing, drought-resistant Chinese elm, favored for planting as an ornamental and shelter-belt tree in the prairie regions, shows up well in comparison with the wood of native elm species, Prof, A. J. Panshin of Michigan State College states (Journal of Forestry, July). It is not as stiff as native elm woods, Prof. Panshin discovered, but it is harder than either white or slippery elm, and compares well with white elm in ability to bear a slowly applied load and in resistance to compression.

COMMITTEE ON TECHNICAL DEVELOPMENT. (Science, August 7) The Committee on Technical Development, a new body for the promotion and correlation of research in general industrial production, is now taking shape within the War Production Board, under the guidance of Maury Maverick, chief of the Bureau of Government Requirements. It is intended to operate along lines parallel to the work of the Office of Scientific Research and Development and the National Inventors Council, supplementing, though not duplicating, their efforts. One of the big jobs of the Committee on Technical Development will be to help practicable research results to become practical and real in the marketplace.

INTER-AMERICAN FARM CREDIT BANK PROPOSED. (United States News, August Organization of an Inter-American Bank of Agricultural Credit was urged at the Second Inter-American Agricultural Conference in Mexico City. Purpose would be to establish farm credit much as the Export-Import Bank extends commercial credit. Funds would be used to develop products in Latin America that could be sold in U. S. markets. High on the development list stood crops that yield vegetable oils. Argentina's delegate, however, pointed to a surplus of linsee oil in his country and suggested that transportation shortages were at the roo of most difficulties, not actual supply shortages.

The Daily Digest

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Washington, D. C., August 11, 1942

FARMERS AND A STABLE ECONOMY. (No. 3 in a new series, The Farmer and the War) We must stabilize the prices received by growers for the products of their lands. Farmers as producers are vitally concerned with the prices they receive and the prices they pay out for commodities used in the production of farm goods; as consumers, they are concerned with the prices they pay out for food, clothing, furnishings, and other goods used in living. The cost of living (for producers as well as for consumers) has risen 15 percent since the outbreak of World War II; the rise has begun to parallel that during World War I.

The average of prices received by farmers has risen about 66 percent since the outbreak of World War II; and the average of prices paid by farmers has increased about 27 percent. Prices received by farmers advanced from relatively low levels; but for the last 8 months the average of prices received by farmers has been practically at parity. In April 1942 the index of prices received was 150 percent of the 1909-14, pre-World-War-I level, and the index of prices paid was 151 percent of that of the 1909-14 period. The ratio of prices received to prices paid was 99.

Farm real estate values also have risen--~~but moderately~~--since the beginning of World War II and in March this year averaged about 91 percent of the 1912-14 level. Deep concern has been felt over the possibilities of a runaway land boom during this period of wartime emergency and an ultimate collapse such as characterized the post-war period of World War I. Effective operation of all parts of the national economic program would inevitably stabilize farm land values as well as the general price level of commodities, goods, and services. This publication (No. 3) is available from Office of Information, USDA, Washington, D.C. No. 1, Farm Land Values and the War, is at present exhausted but is being reprinted. No. 2, Farm Parity Prices and the War, is available.

FIGHT FOOD WASTE IN THE HOME. (USDA Food for Freedom folder AWI-3) One slice of bread molds, one carrot shrivels--small loss, isn't it? But--multiply that loss by our Nation's 34 million homes. Thirty-four million slices of bread, 34 million fresh vegetables, can help nourish many families and many fighting men. Little everyday wastes also make big yearly losses in your own family funds. Help America, help yourself, by fighting food waste on the home kitchen front. Folder is available from Office of Information, Washington, D. C.

VETERINARY RESEARCH COUNCIL. (The North American Veterinarian, August) A brochure outlining the aims and objects of the Research Council of the American Veterinary Medical Association has been published. It emphasizes

the growing need for the services of veterinarians in investigational work. Current world conditions, as well as postwar developments are likely to bring new problems to the veterinarian. The brochure, as well as further information, may be obtained by writing Dr. J. G. Hardenbergh, Executive Secretary, 600 S. Michigan Avenue, Chicago, Ill.

GRAPE COLASPIS AS FIELD-CROP PEST. (Country Gentleman, August) A threatening pest in the Midwest seems to have been checked this year, temporarily at least, by rain. Grape colaspis or clover rootworm, which reduced soybean yields in some Illinois areas in 1940 and 1941, and destroyed cornfields in parts of Eastern Iowa, appeared suddenly only two years ago. Colaspis was well known to entomologists, but never before had attached crops. So far, no dependable controls have been developed. Research is under way, however, and John Rowe and D. R. Lindsay, of the Iowa Experiment Station, report that late fall and early spring plowing has helped reduce infestations. W. P. Flint, chief entomologist of the Illinois Experiment Station, finds that applications of phosphorus fertilizer at corn-planting time may overcome some of the damage.

WOODEN LUGS FOR TRACTOR WHEELS. (Implement & Tractor, August 1) Demonstration of a set of wooden lugs built of wood and attached to the rims of tractor wheels with iron rods was held last month on a farm near Wichita, Kan. Demonstrations were made with a tractor attached to a mower. The tractor was then used to pull through deep muddy ditches and also ran at top speed over solid ground. The tractor was attached to a large combine and worked in a field of wheat. The wood lugs stayed tight and there was no splitting or chipping of the traction surface.

The sponsors of the wooden lugs say that the assembly of wood and steel rods can be made at any trading center where ordinarily such items as 3x6 oak, 1/2 or 5/8 in. steel rods and turnbuckle fasteners are available. The arrangement of wooden lugs can be used on any rim of any size for any type tractor, combine or farm machine used chiefly in the fields. These lugs are expected to give service for an indefinite period when properly treated with a wood preservation and kept tight. There are no restrictions on the manufacture or use of this idea. The wooden lugs are slightly tapered, to give a bearing surface on the ground of about an inch and a half across the lug. They are approximately 18 to 24 in. in length, depending on the width of the rim. Wooden lugs are so constructed as to fit in the well of the rim where they are held firmly. The lugs overlap both sides of rim.

TRANS-ANDEAN HIGHWAY LINKS AMAZON. (Article by this title in Foreign Commerce Weekly, August 8) The establishment of an agricultural experiment station at Tingo Maria, in the jungles to the east of the Peruvian Andes--a town which Peru's new trans-Andean highway has linked to the Pacific coast--and the extension of the trans-Andean highway from Tingo Maria to the navigable headwaters of the Amazon River, are notable among recent major economic developments in Peru. The completed section of Peru's great internal highway passes over the Andes at an elevation of 13,000 feet. This road makes it possible, for the first time in history, for the people and industries of the Pacific coast of Peru to have constant communication and transportation facilities with the rich, but latent, resources of Peru's Amazonian jungles to the east of the Andes.

The highway, now being pushed farther eastward through the wilderness of the Amazon's headwaters, will, when it arrives at navigable depths of the Pucalpa River, create a new kind of "Panama Canal" through the widest part of the South American continent. From the Pacific Coast of Peru it will be possible to travel, or ship freight, overland to the Amazon and, by way of the Amazon, to the Atlantic coast of Brazil. The highway is also expected to open up to exploitation a very fertile region, around the agricultural station, twice as large as the Kingdom of the Netherlands. The road is approximately 175 miles long, and although built by Peru as an internal national road, it will eventually become a vital auxiliary to the international Pan-American highway system.

AMERICAN REPUBLICS TO GROW MORE FIBERS. (Foreign Commerce Weekly, August 8) An effort to develop new sources of fibers in this hemisphere has been started by United States Government agencies in cooperation with the other Americas. As part of this program, the Board of Economic Warfare recently sent a mission around the Caribbean to investigate possibilities of increasing fiber supplies. The itinerary of this mission included Cuba, Haiti, Venezuela, and Colombia. Mexico and Central America also may become more important in the hemisphere fiber-supply picture, now that former imports of such fibers as manila hemp from the Far East have been eliminated. The United States has accumulated substantial stock piles of fibers. But, looking ahead, the Americas now must prepare for expansion of fiber production. Without fibers, war industry and essential civilian needs would be severely handicapped. From fibers comes the material for twine, cables, ropes and threads for shipbuilding, farming, fishing, and for bags and sacks.

USE HORSES AND MULES. (The North American Veterinarian, August) Horses and mules, properly conditioned and used to the utmost, contribute to our war effort by releasing iron, steel, gas, oil and rubber, urgently needed by our armed forces. They use annually less than one pound of steel in harness, less than three pounds in horseshoes and horseshoe nails, per animal at work. Well harnessed, properly shod, fed, salted and watered with common sense, and used as steadily as weather will permit, four horses or mules will do as much work as six usually have done, and will release the critical material our soldiers and sailors need to destroy our enemies.

Airplanes, first of our needs to gain air supremacy and destroy enemy factories producing munitions of war, require all above-named materials. When you use horses and mules, you help build planes. Use horses and mules. Breed your own replacements from your best mares.--Horse and Mule Association of America.

"EGG A DAY" PROGRAM OUTLINED FOR NATION. (Butchers' Advocate, August 5) If the National Poultry and Egg Board has anything to say about it, every person in these United States will be eating an egg a day and every family will have a chicken on the table at least once a week. All branches of the industry are lining up in full force behind the program.

MINJON, NEW APPLE. (Country Gentleman, August) A new apple with the name Minjon, a combination of Minnesota and Jonathan, is hailed by W. H. Alderman and his University of Minnesota staff as "very promising" for both home and commercial orchards. The tree is hardy and productive,

fruiting so heavily that thinning may be desirable in "on" years. The fruit closely resembles Jonathan in size, shape and color. The flesh of fully matured fruits carries the red staining that is so characteristic of Wealthy, its other parent. The color is solid, dark red, bright and very attractive. At the hard ripe stage the flavor is acid but soon changes to a pleasant mild acid. Reports from growers have been favorable, some asserting it is the best apple thus far introduced by the Minnesota station.

ORNITHOSIS MALADY. (The North American Veterinarian, August) First observed by K. F. Meyer, the existence of a nation-wide psittacosis-like infection in pigeons is now reported. Moreover, the causative virus of this malady, known as "ornithosis," leaving the term "psittacosis" for the infection in psittacine birds, is pathogenic for humans and at least ten atypical pneumonias with two deaths (California, four cases with two deaths; New York, four cases; Boston, one, and Minnesota, one) have been traced to pigeons....Further observations indicate the existence of a large reservoir of this virus in the bird kingdom. The wife of a Morristown, N. J., poultry farmer developed psittacosis. There was no exposure to other patients, psittacine birds or other domestic birds except chickens. Three chickens were autopsied; no gross lesions were found but psittacosis or ornithosis-like virus was isolated. The chicken strain of virus could not be distinquished from the pigeon-isolated virus.

AUSTRALIAN WOOL PRODUCTION. (Foreign Commerce Weekly, August 8) During the 1939-40 wool year, 3,639,015 bales of wool were reported to have been produced in Australia, of which 2,625,064 bales were exported and 339,605 used by domestic manufacturers, leaving a remainder on hand of 674,346 bales. The 1940-41 season's yield amounted to 3,506,210 bales, of which the export market accounted for 1,846,479 bales, states a British publication. About 375,000 bales were absorbed by Australian textile mills, according to trade estimates. This apparently left 1,284,731 bales of the 1941 clip in stock, though final disposition is not revealed. Estimates place the probable 1941-42 production at 3,590,000 bales--a slight increase over the previous year.

PAIN AND LOST TIME CAUSED BY WRONG SHOES. (Hide and Leather and Shoes, August 1) Vivid corroboration of the pressing need for more suitable footwear than is now being worn by women in industry and trade is presented by a Wisconsin manufacturer of corrective shoes, who said: "Women now engaged in work formerly done by men, in defense plants, shops, etc., are now forced to remain on their feet for long hours, much longer than accustomed to. Even though the work itself is not heavy, the constant standing in one spot results in great strain on the feet of these workers. The feet, not being conditioned for this strain, break down; resulting pains in the limbs of the women workers are often ignored, or neglected at first. The final result is that the workers are forced to stop work and seek the cause.

"They then come to us. After examination of the feet we often find either completely fallen arches, or arches in the process of breaking down. Often the condition is so far advanced that the worker loses considerable time before going back on the job. We are overly rushed with work, and with a constant waiting list. If they had properly constructed work shoes in the first place, they would not have this loss of time and money spent either on arch supports, or specially constructed arch supports, or

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WEEKLY WEATHER AND CROP BULLETIN. During the past week drought-relieving rains occurred over a considerable south-central area, comprising the lower Mississippi Valley and contiguous regions. Much of the Southwest, especially Texas and parts of Oklahoma, still needs rain. The Great Plains, except parts of the extreme south, continue in unusually favorable condition with regard to moisture.

While harvest of small grain crops progressed in northern sections, there was interruption by rain. Threshing was delayed, and in many localities damage is reported to grain in shock. Threshing returns continue good in the northwestern Winter Wheat Belt, but yields and quality are variable in much of the soft wheat area. In the Spring Wheat Belt heavy rains in southeastern sections interfered with harvest and caused some lodging; combining especially was difficult. However, yields are reported good to excellent. In some Rocky Mountain sections, especially central and western Wyoming, considerable spring wheat has been damaged beyond recovery by continued dryness. An extended period of dry, sunny weather is needed for harvesting and threshing oats. Flax harvest is active in the upper Mississippi Valley, with some rust reported, and late rice is doing well in Gulf sections. Early grain sorghums are maturing in the southwestern Plains where harvest for silage has begun.

Good corn-growing weather prevailed, except in parts of the Southwest. In the principal producing States moisture is now favorable.

In the Cotton Belt progress of cotton was satisfactory, especially in central and eastern portions. In the central States of the belt weather was largely favorable. In the eastern area, while there was too much rain locally in the south, progress is satisfactory.

Potatoes are reported rotting in wet areas and in heavy soils in the Lake region, eastern Ohio Valley, and the Northeast. Sugar beets are in good condition generally. Soybeans are in good to excellent condition in the central States, but some are poor and weedy in southern Illinois. Harvesting peanuts is under way in southern Texas, with good yields; in the Southeast they are fair to good. Tobacco harvesting is practically completed in the Southeast, but there was too much rain in parts of the Ohio Valley. Fruit harvest made good advance in the Pacific States. Citrus groves need rain in Florida, with some fruit dropping; the new crop of oranges looks good in California.

Pastures are good to excellent in the East. In the Southwest, including central and western Texas, dry weather is serious, with stock water low and ranges deteriorating. Haying was interrupted by frequent showers in parts of the Ohio Valley and Lake region, with additional spoilage of cut hay and alfalfa. Elsewhere this work advanced well and some sections indicate an extremely heavy crop. Livestock continue in good conditon.

EMERGENCY PLAN FOR FOOD DELIVERIES SET UP IN N.Y.C. (The National Provisioner, August 8) To prevent disruption of the flow of essential foodstuffs into the New York metropolitan area in the event of air raids, fires, or other war disasters, a system for emergency control of truck shipments, similar to that used in London during the heavy fall blitz of 1940, has been set up. Under the plan, seven control stations have been set up on main highways leading into New York City and New Jersey, manned by inspectors of the state motor vehicle department.

All receivers of food by trucks and truck lines maintaining terminals have been asked to submit at least two alternate locations at which their business would be conducted in the event of air raid damage or sabotage. In the event that a certain terminal area were blocked off, trucks would be stopped at the control stations and ordered to one of the previously determined alternate terminals. In an initial test of the system last month, all of the Gansevoort market area and part of the Washinton market were theoretically blocked off. Drivers bound for these areas were stopped at control points and issued tickets showing how they would be rerouted in the case of a disaster. The test showed that a number of firms had not listed alternate terminals. In the event of an actual area block-out, these trucks would be forced to remain along the highway to await an all-clear signal, with possible loss of perishable foods. Receivers of foodstuffs have also been asked to prepare cards for their customers, and including carriers, suppliers and employes, showing their alternate place of business.

WOMEN'S WORK SHOE NEEDS. (Hide and Leather and Shoes, August 1) This is the third of a series of articles reporting the results of the most extensive study ever made of the potential market for women's work shoes and its requirements. The great army of women workers has been the most improperly shod group of women for many years and continues to be the most improperly shod despite the increased attention now being given to the clothes worn by employed women during their working hours. It is from within the shoe industry that direct action must be started to establish a classification of women's footwear which has always been needed; never developed to any appreciable extent; and which now represents a challenge to the industry to make a vital contribution to the war effort by providing good shoes for women workers and at the same time establish a definite type of shoe that will carry over into the post-war period as a profitable staple.

Gilbert Jonas, styleman for a St. Louis shoe company, places the light weight work shoe, casuals, loafers, etc., first in today's shoe styling and forecasts a steady increase in the demands for these shoes. A. H. Stein Co., Haverhill, says: "We are making some growing girl's shoes and also a quantity of sensible, low heel styles. Would consider an order of women's work shoes." Richard A. Hull, president of the LaGrange company, doesn't think that such a term as "work shoes" should ever be applied to women's footwear. Suggests "service shoes" as more delicate and salable. Women like a little stitching, something to dress a shoe up. This is in direct antithesis to a man who demands work shoes.

FARMING UNDER WAR RELOCATION PROGRAM. (Country Gentleman, August) Under the War Relocation Authority Jap farmers who helped subdue California's Sacramento Delta are now clearing, draining and subduing cutover lands in the Mississippi Delta to bring this rich black soil into the production of long-staple cotton, soybeans, alfalfa, and a variety of vegetables. In the Owens River Valley in eastern California Jap evacues are operating a guayule nursery, and are working toward a 3000-acre vegetable garden. In southern Idaho they are lining a main canal that used to lose nearly half of its water, making possible the cultivation of an additional 30,000 acres in the area. These are just samples of the constructive agricultural work being undertaken by the evacues.

Altogether, the various relocation projects have about 11,000 acres of land in vegetables this season, which goes a long way toward cutting down Uncle Sam's grocery bill for his new wards. By the 1943 season, 90,000 acres of land are scheduled for cropping, and the evacues will be producing food for Lend-Lease and the Army and Navy in addition to supplies for their own tables. The War Relocation Authority estimates that ultimately 200,000 to 220,000 acres of land can be reclaimed and put under plow on the areas now approved.

STUDY EFFECT OF PREGNANCY ON BEEF QUALITY. (The National Provisioner, August 8) Price discrimination by packer buyers against pregnant yearling heifers is not justified if gestation has not progressed beyond the fifth month. This is the conclusion of the University of Illinois experiment station in a study sponsored by the National Live Stock and Meat Board. Five pairs of yearling Hereford heifers were used. One heifer of each pair was bred. Open heifers of each group were full fed and the bred heifers limited to the same amount of feed. On the 150th day of pregnancy, both the bred and open heifers were slaughtered. It was found that there was no significant difference in dressing percentage between the bred and open heifers. Neither was there any important difference in carcass grade except that the carcasses of the bred heifers were noticeably better finished.

SAYS PROPER WORK SHOES WOULD HELP FEET. (Hide and Leather and Shoes, August 1) A Milwaukee firm which specializes in the correction of foot troubles reports: "Our business has increased considerably due to employment of women in defense jobs, and other lines of work where men were replaced. Many of these women workers come to us after too much damage has been done. They wear their cast off dress shoes for work, either shoes with heels that are too high, or with no ample arch support. No thought is given to foot care to offset the wearing of these shoes unsuited to work.

"In the first place these cast off dress shoes should not be worn at all. They ruin the feet of the women workers if neglected. Women come to us, and have to purchase arch supports or specially constructed shoes, and undergo foot treatment. All of this could be prevented if these women workers were educated to buy, and could buy shoes suited to the many new forms of work they are now engaged in. This should open up new fields of sales outlets for women's work shoes, properly constructed. And the women workers should be properly educated on the wearing of well fitting, well constructed work shoes. This is the job of the shoe manufacturer."

SPECIAL MESSAGE TO HOG PRODUCERS FROM SECRETARY OF AGRICULTURE. (Editors' Note in Country Gentleman, August) Here begins our new contribution to the war effort of American agriculture: A page each month set aside by Country Gentleman for the United States Department of Agriculture, in which the leaders of the Food for Freedom program can speak directly to the farmers of our country. Look for the page, written and edited by the USDA every month for the duration of the war.

COLOMBIAN FIBERS. (Foreign Commerce Weekly, August 8) Much interest is shown in Colombia in increased production in fibers, owing primarily to the requirements of the United States and to the recent visit of a fiber commission from North America. It is expected that within 6 to 10 months "fique" fiber production will show important gains, and small commercial production of "pita" and "malba" fibers is expected for the first time, as a result of experimental orders received from the United States.

STATE OFFICES OF MISSISSIPPI USDA AGENCIES UNITED IN ONE BUILDING. The U.S. Department of Agriculture announced today that for purposes of economy and closer cooperation, as well as to provide a more convenient arrangement for the public, all State offices of its branches in Mississippi are to be united in the reconditioned Masonic Temple Building in Jackson, about September 1.

The move is the first of its kind for all of the Department's agencies in a State, although the State offices of two or more agencies often have been located together where suitable space arrangements could be worked out, Arthur B. Thatcher, Chief of the Office of Plant and Operations, said. Located in the Jackson agricultural center will be the State offices of the Agricultural Adjustment Agency, Agricultural Marketing Administration, Soil Conservation Service, Farm Security Administration, and Forest Service. At present the offices of these agencies are in nine separate buildings in Jackson.

WHAT ABOUT TOMORROW'S FOOD STORE? (Editorial in National Grocers Bulletin, August) We can depend on it that eating habits will be changed, and therefore retailers' merchandising, advertising, and sales planning must be changed to fit the existing situation. There will be fewer sweets, less coffee, tea, bananas, fish and pork. There will probably be less beef, rice, fresh dairy products and we may find limitations on our canned fruits and vegetables. If this is a long war, it may be necessary for retailers to refrain from selling canned fruits and canned vegetables at a time when those fresh fruits and fresh vegetables are available for resale. We are to be faced with much more bulk packaging, but there is no need for the "old timer" to expect to go back to the cracker barrel, sauerkraut keg, lard tin or butter tub era. Dehydrated fruits will play a much bigger part in food stores, both during and after the war. In addition to the dried fruits, we now find dehydrated potatoes, onions, carrots, cabbage, spinach and tomatoes. Dehydrated meats are becoming popular, particularly for the Army and Navy and for shipment to our Allies.

Faced with today's price controls, possible inventory and sales control, Victory brands, allocation of customers, selection of wholesale suppliers, or any other regulations which may be issued--the food business is still the most essential and the most necessary business in the nation. Retail food distributors have opportunities for advertising, merchandising and sales promotion which have never before been offered to them. With new or changed packages, new types of foods, old foods in new "dress," there is no end to merchandising opportunities now possible to any enterprising retail grocer.

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BRITAIN GROWING MORE FOOD. (Newsweek, August 10) In London last week, Robert Spear Hudson, Minister of Agriculture, gave out the heartening news that England was now producing two-thirds of its own food, as compared with one-quarter grown before the war. A good record, admitted the head of Britain's "Grow More Food" program, but not good enough; there must be even greater production if the island state is to feed itself. His words were implemented with an authority never before accorded a Minister of Agriculture. Whatever Hudson wants in the way of arable land—private parks, golf courses, building plots, or waste—he takes. If an owner offers objections, the Minister turns over the case to the local War Agriculture Committee of his county. In spite of a labor shortage, all land is put into immediate production. The Women's Land Army, 20,000 strong, tackles the plows and harrows. Schoolboys drive tractors during their vacation weeks. Soldiers on harvest furloughs are working twelve hours a day. The Royal Navy announced last week that sailors will come ashore this autumn to help harvest the crops. Hudson not only provides training in agricultural schools; he also sends around experts to aid farmers in the use of new machinery. This year's goal, 6,000,000 more acres than were cultivated before the war, will restore British farming to its position of 70 years ago when 8,500,000 acres were under wheat, barley, and oats.

HOW TO BE A GREASE-SAVER. (Consumers' Guide, August) (1.) Strain pan and broiler drippings through double layer of cheesecloth into clean coffee or shortening can. (2.) Cover fats and store in refrigerator or cool place. (3.) To clarify used fats with objectionable color, taste, or odor: Melt fat with at least an equal volume of water; heat a short time at moderate temperature, stirring occasionally; let cool; remove fat; scrape off meat, etc., from under side. (4.) Never let fat get hot enough to smoke; may be irritating; gets rancid faster; gives less desirable flavor to food. (5.) If you have one pound or more of waste fat, sell it to your butcher.

WORK CLOTHES FOR WOMEN. (New Farmers' Bulletin, No. 1905) The Bureau of Home Economics is designing clothes for women who do active work. These designs are released to patternmakers and the clothing trade as soon as they are completed. The bulletin (available from Office of Information, Washington, D.C.) describes a field suit, mechanic's suit, jumper-slack suit, protect-all, food-preparation dress, divided-skirt dress, belted coverall apron, surplice coverall apron, laboratory dress, surplice house dress, coverette, princess coverall apron, nurse's uniform, utility aprons.

SALVAGE OF WASTE FATS VITAL TO WAR EFFORT! (National Grocers Bulletin, August) In the National Fats Salvage Campaign all kitchen fats, whether animal, poultry or vegetable origin, should be saved. These include fats from bacon and ham, from frying or broiling steaks, chops, or any roast, together with all of the fats that come from the cooking of poultry such as ducks, geese, chicken and turkey. It also includes the fats from fish fries and from deep fat frying. Regardless of the odor, if the fat is clear it is acceptable. All salvage fats, however, must be absolutely clear and put through a fine mesh strainer. Consumers may use any clean, dry container. Vegetable shortening cans, coffee cans, or any other such cans will answer the purpose. No one should use bottle or other glass containers, since it is too easily broken.

Approximately 12% of glycerine is extracted from all animal and vegetable fat. This glycerine is used in the manufacture of nitro-glycerine, TNT and guncotton with which our shells and bombs are loaded. Everyone realizes the necessity and importance of these explosives in the war effort, and surely there will be no question about 100% cooperation in the fats salvage campaign. Our country needs waste fat urgently.

WATER CHESTNUTS. (Newsweek, August 10) The United States Army will call off for the season its four-year submarine warfare campaign against the Potomac River water-chestnut beds. From a 2-acre patch near Alexandria in 1923, the beds had spread to 9,000 acres stretching 40 miles down the Potomac from Washington when Army engineers first attacked them in 1939. Growing in shallows and bays, the shiny-green, close-packed beds pollute the river by holding decayed organic matter. They destroy fish and wild-fowl plant food, make the waters impassable to small craft, and are mosquito-breeding grounds. Since 1939, the engineers have cleared 3,500 acres which extended 12 miles down-stream from the capital. They estimate that ten more years, including six for mopping up operations, will see the job completed despite an annual regrowth of about 25 percent.

FILLING NEW JOBS. (Pathfinder, August 15) While some are losing jobs others are finding them, and where some areas are depressed others are booming; but while there are ups and downs in employment the whole picture shows a continued upward trend. The U. S. Employment Service reports that total job placements in June were close to a million, and that they had increased sharply for the fourth successive month. Farm placements for June were 281,000--an increase of 54 percent over the previous month, and 60 percent more than in June, 1940. For the first six months of the year the farm placements totaled 600,000. The greatest increase in farm placements took place in Arkansas, California, Idaho, Missouri and Washington. Applications were said to show that more women are indicating a desire to do war work, and that many students are taking summer jobs on the farm.

INTRODUCES NON-METAL FOUNTAIN. (Poultry Supply Dealer, August) A new poultry and turkey fountain which contains no metal has just been placed on the market. The drinking cup and funnel are made of heavy, double-annealed flint glass and the other parts of the assembly are of a new, non-corrosive plastic which is not affected by water or age and withstands strong acids, high pressures and rough usage.

MAY SEE MAHOGANY FORESTS IN FLORIDA. (Florida Grower, August) Hundreds of experiments are today under way that will, if successful, make Florida a new source of raw materials that formerly came from across the seven seas. Production of Rhodesian mahogany, Khayanyasica, on thousands of acres of little-used South Florida land is among the more commercially significant of these prospects. Observations in a forestry block containing 20 Khaya trees, at the sub-tropical experiment station, Homestead, indicate a marked superiority in growth of the Khaya over pines, Pinus caribaea, in the same plot and at the three ages measured. The mahogany trees were almost twice as tall in over-all tree height and produced about twice as long a clear log length as pines of the same age.

CIVIL SERVICE EXAMINATION. No. 252, Unassembled. Rate Clerks Needed, $2,300 and $2,600. For filling the positions of: Freight Rate Clerk (Land Grant), $2,600; Passenger Rate Clerk (Land Grant) $2,600; Freight Rate Clerk, $2,300; Passenger Rate Clerk, $2,300. Hundreds of appointments to be made for Civilian War Service. Applications will be accepted until the needs of the service have been met.

WHAT DO WOMEN THINK ABOUT "WORK" SHOES? (Hide and Leather and Shoes, August 1) Previous articles in this series, published in the June 13 and July 4 issues, have revealed that the potential market for women's work shoes is large, lucrative, and almost wholly uncultivated; that attention to the needs of this market now would be a valuable contribution to the war effort and would provide a sound foundation for post-war sales; that shoe manufacturers are interested in the possibilities of making women's work shoes; and that they are prepared to cooperate in providing working women with suitable work footwear, properly identified as such.

Additional personal interviews with shoe manufacturers, wholesalers, and retailers are reported in this ussue. But what do the women think? What kind of shoes are they now wearing to work; are they satisfied with them; what do they now pay for the shoes they work in; would they buy specially designed work shoes, what would they pay for them, and what do they want? To find the answers to these questions, "Hide and Leather and Shoes" asked women in many diversified occupations for their views. Their answers are revealing and convincing. They will be reported in the fourth article in this series, to be published in the Sept. 5 issue.

EROSION CONTROL IN MEXICO. (Soil Conservation, August) In Mexico erosion is a serious problem in numberous localities, particularly on the steeper slopes that have been under cultivation for some generations. In various localities overgrazing has started some severe washing. One of the most violently eroded sections is in the hill country surrounding Lake Patzcuaro in the State of Michoacan.

In some parts of Mexico, farmers have long practiced the building of stone fences across slopes approximately on the level, apparently to catch soil moving downhill under the impact of uncontrolled runoff from rains. After a time this practice has brought about the development of bench terraces of a decidedly stable nature--pretty nearly secure against erosion. Something of the same kind has been accomplished in some fields with contour plantings of maguey. Again, there are areas in northern

Mexico where grazing has not been severe. Some of these localities have the best natural grazing lands to be seen anywhere under low rainfall conditions.

LIVESTOCK TRUCKING SURVEY. (The Illinois Agricultural Association Record, August) On the basis of surveys of present driving averages, tire mileages of trucks hauling livestock to the four major Illinois markets are good enough to continue hauling to Chicago for nine months, to East St. Louis for 10 months, to Peoria 14 months and to Springfield 15 months. The survey conducted by R. C. Ashby, Ill. College of Agriculture, shows that a much smaller percentage of trucks hauling livestock to the smaller markets in Peoria and Springfield were meeting ODT transportation requirements than of those hauling to the Chicago Union Stock Yards. Compared with 51 percent meeting the requirements at Chicago, only 20 percent at Peoria and 5½ percent at Springfield are meeting or exceeding the ODT load requirements. The survey covered 516 trucks including 226 at Chicago, 148 at East St. Louis, 87 at Peoria and 55 at Springfield.

POULTRY FEATHERS NEEDED. (Poultry Supply Dealer, August) A plea to save all kinds of poultry feathers was voiced at Grand Rapids last month, at the rally of the International Baby Chick Association, by H. L. Shrader, USDA Extension poultryman. "The nation is short several million pounds of feathers for comforters, millinery and military purposes as a result of the war," declared Shrader. Importations of 3,000,000 pounds of waterfowl feathers from China, Poland, Hungary and Russia, have been cut off. This shrinkage can only be offset by saving more chicken feathers. Shrader estimated the feather crop at 10,000,000 to 15,000,000 pounds a year and suggested sorting the feathers according to size. The present market on turkey and chicken feathers is about 5 cents a pound. Duck down has a value of $1 a pound, while goose down brings about $1.35 per pound.

BRITISH COLUMBIA CHILDREN HELP SAVE BERRY CROP. (American Fruit Grower, August) A serious condition exists in the Lower Fraser Valley strawberry-growing districts in British Columbia where this industry was formerly controlled mainly by Japanese growers who have been evacuated from the Pacific Coast zone. Last year the crop was worth $250,000 and a large percentage of it was exported to Great Britain. This year the British government ordered a minimum of 500 tons of berries which were to be preserved and put up in barrels. To relieve the situation, the government agreed to release school children in grades 9,10, 11 and 12 as early in June as required and through the month of September, provided they were qualified to proceed to the next grade on the basis of work during the preceding term. On farms close to Vancouver and New Westminster the growers made arrangements for the daily transportation from and to the cities for pickers. In the more remote districts other arrangements had to be made for the 7,000 to 9,000 pickers required.

PERU GRANTS LOANS TO BETTER FOOD SITUATION. (Agriculture in the Americas, August) The Industrial Bank of Peru has been empowered to grant loans for improving the country's food supply and shipping facilities. Loans under this authorization will be used to open new foodstuff plants and enlarge existing ones and also to increase the number of ocean and river vessels used in supplying domestic food needs.

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The Daily Digest

Prepared by the Press Service for the use of USDA employees. Views and opinions in these items are not necessarily approved by the Department of Agriculture.

Washington, D.C., August 14, 1942

ORANGE RIND BLEMISHES AND JUICE QUALITY. (The Citrus Industry, August) The relationship between rind blemishes and juice quality in citrus fruits is still a much debated question. As a typical example, one is frequently told that russeted fruit is sweeter than bright fruit. Studies were made by the U. S. Department of Agriculture at Orlando, Florida....There is a significant difference between bright and russet oranges in so far as total acids and vitamin C values are concerned. The differences in total solids are not significant. For practical purposes blemishes in the rinds of oranges caused by rust mite and melanose do not seriously affect juice quality. Six people were asked to taste the juices of midseason oranges. One could detect no difference in the flavor of the juice from the bright and russet fruit. The others found slight differences in three out of eight lots. When a difference in flavor was noted, the juice from the russet fruit was described as "tart to pleasantly tart" as compared to "pleasantly tart" for the juice of bright fruit. In one or two instances the juice from the russet fruit was even considered sweeter. In samples of Valencia oranges no difference in flavor could be detected in five out of the six lots. In the sixth lot the juice from the russet fruit was considered "tart to pleasantly tart."

SHEARLINGS NEEDED FOR ARMY PILOTS. (Coastal Cattleman, August) It takes 12 shearlings to outfit an aviator with parkahood, jacket, gloves, pants, and boots--or about 90 square feet of sheepskin. Now multiply that figure by 65,000--our airplane goal for 1942, and then multiply by about 3--pursuit ships take one man and the bombers take more. Here are some of the difficulties: Few range producers who sell slaughter or feeder lambs in the late summer or fall will shear their animals before shipping because the small quantity of very short staple wool per head--even considering the relatively high price of shearling skins--would hardly offset the cost of shearing, extra shrinkage of the lambs, and the possibility of heavy loss following cold fall rains or early snow. It is also doubtful whether Corn Belt or western feeders, who feed their lambs in the open, would be very keen buyers of shorn lambs. Such feeders ordinarily do not have facilities for shearing lambs nor the right kind of shelter for shorn lambs.

The most promising method of getting shearlings from these winter-fed lambs would be to move them to commercial feed lots, shear them, and put them on feed for a few weeks. Additional shearlings could be obtained by shearing native lambs in the late summer and holding them for some weeks before marketing. A fair fleece of lamb's wool could be shorn from such lambs, but the shearlings would be mostly a coarse wool type. Another method of getting short wool shearlings would involve shearing lambs bought for slaughter so as to leave about a quarter of an inch of wool on the skin. This, of course, would mean a considerable shrinkage in weight and possibly some deterioration in quality.

The Department of Agriculture is well aware of the problems that complicate the shearling situation, but such problems do not appear unsurmountable. If we can build 65,000 airplanes a year and train pilots to fly them, we can certainly round up enough sheepskins somewhere to keep those pilots warm.

DELIVERED MILK. (Editorial in The Moos, August) It is interesting to note that little opposition has arisen in the more or less rural counties to the method of every other day delivery, but in certain urban districts serious opposition has developed to this method of delivery which has been sufficient to prevent its being made a uniform system. Door-step delivery created no vested right in any organization. Consumers, when gas and rubber are no longer rationed, will be the sole arbiters as to the method of delivery that they, as consumers, desire. It seems unfortunate that, at a time when all of us are called upon to do our utmost to conserve materials for a successful prosecution of the war effort, we can not all join in a program that has such a worthy objective.

USE OF ANTIOXIDANTS IN KEEPING POWDERED MILK. (National Butter and Cheese Journal, August) The use of antioxidants in ice cream, butter, and market milk has been studied by several investigators. Very few studies apparently have been made of the use of antioxidants in controlling the oxidized flavor in powdered whole milk. To obtain information of this nature a study was made at the University of Illinois. The conclusions were: The development of oxidized flavor as well as a browning in color and reduction in solubility are important problems in the storage of powdered whole milk. Maximum keeping qualities will result when copper contamination of the milk is avoided, when the milk is heated to 170 degrees F before condensing, when antioxidants such as hydroquinone or gum guaiac are used, when the powder is dried to a moisture content below 5 percent, and when storage takes place at temperatures under 20 degrees C. It is also important that the containers used be airtight and so treated that metal surfaces do not come in contact with the powder.

DEVELOPMENT IN ECUADOR. (Agriculture in the Americas, August) To stimulate the economic development of Ecuador, a corporation called the Corporacion Ecuatoriana de Fomento was formed in Quito late in June as a cooperative effort of that country and the United States. Quito newspapers shortened the name to CET. Authorized to develop and improve agriculture, mining, industry, and transportation, CET will give immediate attention to beginning or increasing the production in Ecuador of such war materials as rubber, fibers, vegetable oils, and drug plants. It will also give attention to rehabilitating the production of high-quality cacao, of which Ecuador was once the world's leading supplier. It will use information gathered by the Ecuadoran Economic Resources Mission, a group of Department of Agriculture technicians who recently completed a 6-month assignment in the country.

NORWEGIANS FEEL SHOE SHORTAGE. (Hide and Leather and Shoes, August 1) A marked shortage of shoes is indicated in Norway by the advertisements being run in newspapers of that German-occupied country. One recent barter and exchange item stated, "Can offer valuable old violin for a pair of strong, man's shoes, size 8½." A second offered a light summer suit worth $25.00, and a mandolin worth $33.00 for "one pair of good shoes, size 9, must be leather."

EVENING UP THE CHANCE TO EAT. (Consumers' Guide, August) Who is the best fed Englishman, outside of military duty? He is a seaman. British national policy determines not only who gets what kind of arms; it decides also who gets what kind of food. That goes for civilians as well as fighters. Seamen, because of the hazardous, arduous, and exacting nature of their work, get 7½ pounds of meat a week, 7 or 8 times the amount allowed a Government clerk, or a banker, or a newspaper reporter. Seamen get 4 times as much sugar, 2 times as much tea, more than 2 times as much butter and margarine, and 2 times as much bacon or ham as ordinary people can claim.

Who are the second best fed people in England? Here it is a toss-up between miners and workers in heavy industries and the children. Why a nation at war decides to give its hardest workers first call on its food is obvious. If munitions are to be turned out for the fighting men, the munitions workers need diets that will sustain their working capacity. But how about the children? They don't make munitions. Well, the British say there is no point in fighting a war for survival if the survivors--the people of the next generation--start life crippled and disabled by malnutrition. Fighting a war for survival means fighting the enemy with arms, and fighting malnutrition among workers and children by giving them priority on the food they need.

"FISHTAIL" SPRAY RIG. (American Fruit Grower, August) The fight against thrips in citrus groves presents a problem in that only twenty gallons of tartar emetic spray are required per acre for complete coverage, and the application of such small amounts of a concentrated liquid over a given area requires that the liquid be atomized into a great number of exceedingly small droplets so that the coverage will be uniform. Agricultural engineers of the University of California have solved this problem, however, A riguses air to convey the atomized spray onto the trees. There are six nozzles on each side of the "fishtail" outlet and the machine will apply dust alone, liquid alone, or dust and liquid in combination.

Ill. DEFENSE PROGRAM FOR RURAL AREAS. (The Illinois Agricultural Association Record, August) A rural civilian defense and protective program is being set up in Illinois farming districts and unincorporated towns under the sponsorship of the Illinois Sheriffs' Association with the cooperation of the Rural Crime Prevention Bureau of the state. This coordinated policing effort is being built around the county sheriff with volunteer citizens making up the ranks of the township and school district "Minute Men." These persons are to be the "eyes and ears" of the sheriff in civilian defense in furnishing a safeguard against destruction of crops, the disabling of farm machinery through theft of irreplaceable parts, the sabotage of gasoline, of high tension power lines and railroads passing through or near farms by enemy agents.

TINGO MARIA STATION HEAD. (Agriculture in the Americas, August) Director of the Peruvian agricultural experiment station now being established at Tingo Maria will be Benjamin J. Birdsall, Department of Agriculture soil scientist. Dr. Birdsall served on the Central American agricultural staff of a United States firm from 1929 to 1936, then returned to the States for graduate study at Michigan State College. Since last November, he has been with the Department of Agriculture as a member of the Ecuadoran Economic Resources Mission. The Tingo Maria station is based on a United States-Peruvian agreement signed in April.

CALCIUM OXIDE, SUGAR IN CHEESE MANUFACTURE. (National Butter and Cheese Journal, August) Results indicate it is desirable practice to add sugar and calcium oxide to milk for cheddar cheese purposes. The results obtained are noteworthy since the cheese was made by a maker who had never used the method. Forthermore, better procedures for adding the mixture have been developed; and better grades of calcium oxide than those used are available. Permission to make the experimental batches was granted by the New York State Department of Agriculture and Markets. The cheese did not enter inter-state trade.

At present experiments are in progress to study the effect of adding calcium oxide and sugar to milk for Limburger cheesemaking. Preliminary trials indicate that there should also be an advantage in Limburger cheese-making.

(of the American Medical Association)

/BRITAIN COLLECTS MEDICINAL PLANTS. (London correspondence in The Journal, July 25) Before the war we imported most of the medicinal plants we required, as we did most of our food and of many other things. But the need to devote as much shipping as possible to purposes of the war has compelled us to develop and use our home resources. In normal times many hundreds of tons of medicinal plants which could be gathered from the countryside were imported. Even such common plants as dandelions and stinging nettles were imported for the manufacture of drugs. This year the collection of medicinal plants is being organized on wide lines. Herb committees have been set up in forty-eight counties to arrange the collection drying and dispatch to the manufacturers. Schools and youth organizations are helping in the collection. Among the wild herbs now being collected are buckthorn, red poppy petals, elder flowers, comfrey, coltsfoot, horse radish, hyssop, hemlock, henbane, foxglove, dandelions and stinging nettles.

THE BY-PRODUCTS OF WAR. (Coastal Cattleman, August) The scrap metal and rubber drives have worked wonders in cleaning up the farm and city. Piles of junk that were so commonplace in the past on farms and in many city lots are rapidly disappearing and in their place grass and gardens are being planted. The present day farm is quite different from the farm of two years ago. Terracing programs and increased acreage of many farm products has taken the once bare and desolate appearance away from farms. Extra profits as well as the necessity for repairing have made most of our American farms much more attractive than they were a few years ago. The shortage of farm machinery has forced farmers to take better care of their present equipment and as a result run down farms and farm machinery are a thing of the past.

WHY DOES AMA BUY PROCESSED CHEESE? (From Memorandum to State War Board chairmen, August 6) On desert and tropical battlefronts canned processed cheese will keep, but natural cheese packed in ordinary boxes will spoil in a short time. The canned processed cheese that AMA buys is one-half No. 2 American cheese and one-half No. 1. Purchases of relatively small amounts of processed cheese help the milk producer as well as the processor. It means another outlet for the farmer's milk. Processors buy some of the cheese from small cheese factories.

All cheese bought by AMA has to be Federally inspected before it leaves the warehouse. U. S. No. 1 American cheese must have a fairly pleasing flavor, may be either uncolored or medium colored, the surface condition must be fairly uniform, dry, properly bandaged paraffined. It cannot have a moisture content higher than 39 percent and must be free from mold under the paraffin and free from soft or rot spots in the rind. The quality requirements for No. 2-A are slightly lower.

The Daily Digest

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AMA SUPPORT PRICES FOR DAIRY PRODUCTS AND FARMERS. (From Memorandum to State War Board chairmen) It is believed that recent price increases have resulted in an increase over the first half of July of about two cents per hundredweight to farmers producing milk for butter and roller skim manufacturing outlets, to the farmer supplying butter and spray skim outlets as much as 10 cents, to farmers supplying milk for butter and casein, and butter and food powder outlets about 6 cents per hundredweight. Cheese outlets up eight cents. Evaporated milk--down 5 to 10 cents per hundredweight.

By advancing seasonal increase in prices of most dairy products, more milk will be produced than would have been otherwise. This is making possible accumulation of reserves which will better enable us to meet any unexpected Lend-Lease demands and also to prevent run-away dairy prices for domestic consumers. Price shift serves still another purpose — it will draw manufacturers to production of those products most urgently needed (butter, spray process skim and whole milk powder) and away from evaporated milk and roller process skim milk powder.

AGRICULTURAL ATTACHE TO CUBA. (Agriculture in the Americas, August) An addition to the corps of agricultural workers in Latin America is Paul G. Minneman, recently appointed by the Department of State as agricultural attache of the United States Embassy in Havana, Cuba. In 1941, Mr. Minneman served with a United States technical mission that surveyed the resources of Cuba for the government of that country and made recommendations of methods suggested for diversifying Cuban agriculture. Since then he has been on assignment to the Department of Agriculture for research on the ... American tropics.

PRICE FORMULA FOR REDESIGNED FARM MACHINERY ANNOUNCED. (War Letter for Agriculture, August 10) Makers of farm tractors and other farm equipment have been given a formula by OPA for calculating maximum prices of models for which there have been changes in design or construction since March 31, 1942. Applied to the present change over from rubber tires to steel, the formula is expected to bring about reductions in the prices of most tractors and farm implements, according to the OPA announcement. The formula provides for the addition or subtraction of net increase or decrease in factory costs attributable to the change in design or equipment.

DAIRY CATTLE CONGRESS TO BE HELD SEPT. 7-13. (National Butter and Cheese Journal, August) Supported by a poll taken of dairy and livestock leaders who contacted thousands of farmers, the thirty-third annual Dairy Cattle Congress and Allied Shows will be held September 7 to 13. The advanced dates provide a condensed circuit for livestock breeders and make it convenient for exhibitors to bring their herds to the exposition from all of the central western state fairs at which major dairy cattle and draft horse shows are held.

TRENDS IN FOOTWEAR. (Editorial in Hide and Leather and Shoes, August 1) The development of light footwear for men, women, and children since the close of World War I reached proportions that never before had been dreamed of. This result has frequently been attributed to a number of trade factors—more attention to encouraging design and fashion variety, development of lighter materials and shoe construction methods development of manufacturing methods which enabled shoe manufactures to make this sort of footwear in large volume and to make it available for all.

The shoe and leather trade has only been partially responsible for the growth of the light weight shoe, however. Far more important, has been the fact that the country adopted a manner of living between 1918 and 1942 which made light clothing and light shoes far more desirable than they had ever been before. Now the service requirements of footwear are steadily becoming more severe. The footwear of the automobile's heyday just won't serve the purpose today. Certainly, the footwear that was fine for an afternoon bridge party won't fill the bill on a pair of feet that must stand at a whirring machine. Nor will the footwear that seemed so smart and attractive to a girl in an average office seem half so desirable to the same girl who is now serving with the WAAC.

The physical change from light to heavier footwear is going to be just as noticeable. The youth who has never worn anything but light oxfords finds his new Army service shoes heavy, stiff, and uncomfortable when he first puts them on. But after hours on the drill field, working steadily at Army jobs, or tramping miles over highways, byways, and rough fields the same shoes seem a lot different than they did at first. The same must be expected in the case of the WAAC shoes and in the changing trend that must take place in footwear in general to meet the new wear requirements.

One grave mistake which many shoe and leather men made in the last two decades was in assuming that light shoes that were perfect for city streets and ballrooms were equally desirable for country paths or work wear in stores and factories. The main purpose of fashion—to serve functional needs and at the same time improve appearance—was sometimes applied to only one group of wearers and while this group was well served by fashion, other groups were neglected. The present need for revising shoe fashion trends to meet new service requirements in all fields, and the desire to preserve at the same the fashion progress that has been made by the industry makes it imperative that some of the mistakes of the past are not repeated.

BOLIVIA TO HAVE NEW SUGAR FACTORY. (Agriculture in the Americas, August) Plans have been announced in Bolivia for the construction at Santa Cruz of a sugar mill that will have a capacity of some 4,000 tons a year. The machinery has been purchased from an Argentine firm, and it is hoped to begin operation of the plant this year. Bolivia now depends on imports for a large part of its sugar needs, which amount to more than 25,000 tons a year, but is anxious to cut down on this deficit. Sugarcane can be grown successfully in many parts of the country.

SUGAR FOR HOME-CANNED FRUIT JUICE. (War Letter for Agriculture, August 10) Sugar rationing regulations have been amended by OPA to include fruit juices as well as fruit for home canning purposes. This means that one pound of sugar may be allowed by local boards for each four quarts of fruit juices canned.

HOW-ENGLAND EATS. (Consumers' Guide, August) In England before the war people ate according to their tastes and their pocketbooks. The 10 percent of the population, for example, which spent most money on food, spent an average of $3.50 a week a person. This bought the average well-to-do family something like 14 pounds of bread, flour, and other cereals; 4.6 pounds of sugar; 1.3 pounds of jams, jellies, and sirups; 2.7 pounds of other sweet foods; 12.7 pounds of potatoes; 11.6 pounds of meat and bacon; 3.7 pounds of fats and oils; 0.6 pounds of cheese; 17 pounds of eggs; 0.6 pounds of tea.

Bread and flour have not been rationed in England so the war has had no affect on the consumption of these foods by the upper 10 percent of England's eaters. But the war has cut down the sugar they get by 46 percent, meat by 59 percent; fats and oil by 49 percent; eggs by more than 75 percent, tea by 17 percent. Cheese consumption, however, has gone up slightly since the war, some 17 percent.

The 10 percent of the pre-war British population which spent least on food paid out about $1 a week per person at the food stores. The 10 percent at the bottom of the food scale got less than half as much meat as the upper tenth-ers, only a third as many eggs, about three-fourths as much sugar, about two-thirds as much cheese, about two-thirds as much fats and oils, and about the same quantities of bread and flour potatoes. War has re-directed the distribution of the British food supply. The upper tenth, and the lower tenth, and the inbetween tenths get shares of the food according to thier need.

TRUCK PERMITS ISSUED FOR FARM HARVEST. (War Letter for Agriculture, August 10) To facilitate the free movement of farm products and supplies during the harvest season, ODT has issued a general permit relieving common carriers when engaged in such service from the requirement of clearing their trucks through the Joint Information Offices. This covers only operations originating at or terminating at the farm. Contract and private carriers likewise have been relieved from this necessity and also from restrictions on mileage and limitations on numbers of deliveries when engaged in hauling products and supplies to and from the farm. Both exemptions become void after October 31.

Another ODT permit enables contract and private carriers to haul forest products by truck to the nearest point where rail or water transportation facilities are available without checking with Joint Information Offices and also without regard to mileage restrictions. The exemption also applies to trucks hauling pulpwood, chemical wood, extract wood, or pulpwood logs to a consuming, processing, or storage point as well as to a rail or water shipping point.

FINDS CANADA STRONG COMPETITOR IN S. AMERICA. (Hide and Leather and Shoes, August 1) A Canadian shoe manufacturer says that Canadian competition in Latin-America is, if anything, stronger than Germany's ever was--aided as it is by the exchange differential in Canada's favor, and the fact that upper leathers are evidently not in short supply at all in Canada so that no Certificates of Necessity are required as on U. S. exports.

THIAMINE (VITAMIN B-1) IN AMERICAN DIET. (Editorial in The Journal of the American Medical Association, July 25) In a recent contribution on the thiamine content of the American diet, Williams and his co-workers (J. Nutrition 23: 613 (June) 1942) state that their plan involved an attempt "to formulate a sequence of diets which contain all of the more important foodstuffs of the American dietary in proportions corresponding to the annual per capita consumption of each." Significance is given the conclusions through the use, as the principal basis of computation, of the extensive data of Stiebeling and Phipard (Circular 507, U. S. Dept. Agri., 1939) on diets of families of employed wage earners and clerical workers in cities. The assay was carried out by a modern chemical method supplemented, when indicated, by animal tests.

The cereal products account for 47 percent of the total daily calories and, when the white bread was not fortified with added vitamin, for 24 percent of the thiamine. The dairy products, providing 18 percent of the energy, give 21 percent of the thiamine. Meat, which accounts for 15 percent of the calories, is responsible for over 26 percent of the thiamine, and of this total pork provides almost 22 percent alone. The energy yielded by the vegetables is only 8.8 percent, but the proportion of the total vitamin B_1 is high, namely 21.5 percent. The fruits provide 4 percent of the calories and 9 percent of the thiamine. Corresponding to the total daily energy intake of 2,500 calories is a total vitamin B_1 intake of about 0.8 milligram.

WHAT PRICES HAS AMA PAID FOR AMERICAN CHEESE? (From Memorandum to State War Board chairman) Until recently AMA bought only U. S. No. 1 American cheese — in fact, every third pound made in the U. S. In March 1941, when Lend-Lease purchasing first began, the price of No. 1 American cheese on the Wisconsin Exchange was 14.7 cents a pound. Then, as that buying program shifted from low to high gear prices climbed steadily — June 1941 about 18½ cents, July 20.8, September 231 1/4. Beginning in February 1942, when dairy prices usually decline the price was adjusted downward to 22 cents, in March, to 20 1/4 cents a pound. AMA'S support price is now 21 cents for U. S. No. 1 American cheese.

Production of No. 2 cheese has increased along with No. 1. Thus, No. 2 stocks on hand are somewhat heavier than during normal times. Until recent months, AMA bought only No. 1. Because it became more profitable, farmers who had been shipping cream changed over to whole milk — an entirely new type of production that takes time for adjustments. Also, factories with inexperienced cheese makers sprang up in new areas where cheese hadn't been produced before.

By buying limited quantities of No. 2-A, AMA hopes to relieve the storage situation and at the same time keep the prices paid to farmers from dropping unreasonably low. Requirements for this grade, however, are designed to include only that portion of the No. 2 cheese that is suitable for Lend-Lease handling under wartime conditions of storage and shipping. So far U. S. No. 2-A cheese has been purchased at 2 cents a pound less than the price for No. 1. This differential should encourage the production of more No. 1 cheese.

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TEMPORARY PRICE LIMIT FIXED FOR LAMB. (War Letter for Agriculture, August 10) In its first move toward controlling lamb prices, OPA has placed a 60-day temporary ceiling on lamb at the wholesale and retail sales levels. This completes price control over every major meat item except poultry. The temporary regulation, issued to prevent a sharp advance in retail lamb prices, sets the wholesale and retail ceiling at the highest price charged by each seller during the period July 27 to 31, 1942. Lamb price control is centered only on the slaughtered product. It does not cover live animals. Further, farmer sales of dressed lamb are exempt from the regulation, provided that such sales or deliveries, together with all other commodities grown and processed on the farm, do not top $75 in any one calender month. Also, deliveries may be made to the Army and Navy and to the Federal Surplus Commodities Corporation at prices fixed in a contract before the effective date of the regulation.

CHOCOLATE MILK DRINKERS DRINK MORE MILK. (Milk Plant Monthly, August) In the March issue of this publication the findings of a study by the Wisconsin Agricultural Experiment Station on the relationship of chocolate milk consumption to that of total milk consumption for families in one Wisconsin city, Madison, were reported. The article showed that a considerably higher per capita milk consumption was found to exist among families classified as chocolate milk drinkers than among those not so classified. In the present article the results of a comparable study conducted in two industrial cities of Wisconsin, namely Racine and Kenosha, are reported and some comparisons with the findings of the earlier study are made.

The findings in these two studies reveal that on a fluid basis the per capita milk consumption in families that bought chocolate milk was higher than that of the families which did not purchase it. Apparently those that have a liking for chocolate milk consume more milk than those who do not care for it. The results of the study in Racine-Kenosha corroborate those of the Madison study.

CHEMICALS AND GROWTH INFLUENCE. (Florists Exchange and Horticultural Trade World, August 15) The latest issue of Contributions from the Boyce Thompson Institute, Yonkers, N. Y. discloses that P. W. Zimmerman and A. E. Hitchcock have been studying the effects of a series of new chemicals and their influence upon plant growth. The tests, made upon growing plants and the distortions known as epinasty, indicate that apart from the score or more chemicals known to affect cell growth, there are many others of the phenoxy and benzoic acid groups that possess similar powers. However, the tabulated results do not indicate any of them are superior to the accepted growth-promoting materials.

Experiments also have been made with treated or decomposed kitchen waste or garbage and its effect upon crops when mixed with the soil. Made under glass, the tests show that kitchen waste for some economic crops is superior to stock yard manuare, but the processing beforehand calls for special equipment. The so called bio-dynamic method of culture entails the use of some kitchen waste.

FLYING MILK CARS MAY COME TRUE. (The Creamery Journal, August) A. C. Baltzer, Michigan State College dairyman, in an address before the Michigan Association of Creamery Owners and Managers and the Michigan Allied Dairy Association, told the dairymen to take a long look into the future and foresee the probable changes in transportation. Mr. Baltzer predicted large creameries would by surplus bomer planes from the War Department after the war and use them in milk and cream ferrying services. He predicted milk air ports would be established in rural communities where the cow population warrants; that the planes would be used to transport the dairy products from surplus production areas to large consuming centers. He predicted the dairy business would become more interstate than ever before.

In the opinion of Col. John H. Houett, president of the Aeronautical Chamber of Commerce, writing in the magazine, Flying, all lines of industry are destined to be using flying box cars after the war. He foresaw the development in the postwar period of trans-continental air freight lines, competing with rail, boat and truck lines in much the same manner as trucking companies sprung up following the first World War to compete with the railroads and steamship companies.

THINNING PEACHES BY CLUB METHOD. (New Jersey Farm and Garden, August) A labor-saving device which is finding growing favor this season is the use of a club to thin peaches. Although this is not a new method, having been in use by some growers for more than twenty years, it has attracted increasing interest with the growing scarcity of labor resulting from the war. Several types of clubs have been devised for this operation, and studies were made in the N. J. Experiment Station orchards last year as to their relative merits.

Two fairly light clubs, about the size of a broom handle, give the most satisfactory results. One is about eighteen inches long, the other about forty inches. Both are topped with a piece of garden hose, three or four inches long. A lip is cut in the end of the hose so that peaches can be scraped from the tree where it is not practical to knock them off. Last year, hand thinning required about seventy-five hours of labor for an acre of peaches, with a cost of approximately $25. The clubbing method required only 15.5 hours of labor and was accomplished at a cost of $5.40 an acre. Growers who have tried this method report comparable savings in time and money.

WHY MUST LEND-LEASE CHEESE BE SO DRY? (From Memorandum to State War Board chairmen) It has to keep. Usually, it takes 3 days to ship cheese from Wisconsin to New York City and sometimes the cheese is held for 3 or 4 weeks waiting for a boat. It's another 3 or 4 weeks until it reaches another port. In some instances the cheese is not consumed for a year after it leaves the cheese factory. We must have top quality cheese to stand up this long under continuous handling without refrigeration. Once spoiled, it is no good whatsoever. Compared with low moisture cheese, high moisture cheese is more apt to mold and to develop bacteria that very quickly change the flavor. Low moisture cheese means more actual food value and less water per pound of shipping weight.

AGRICULTURAL BANK CREATED IN BOLIVIA. (Agriculture in the Americas, August) An agricultral bank has been created in Bolivia by a decree of the national government. Its functions are to organize exchanges for

agricultural and industrial products; buy raw materials and semiprocessed agricultural products for distribution to industry; import seeds, fertilizers, purebred livestock, raw materials, machinery, and tools for farming purposes; and buy and sell foreign currency.

RURAL MAIL CARRIERS WILL SELL BONDS. (Coastal Cattleman, August) The United States Post Office Department has issued instructions to all postmasters in charge of rural routes to arrange immediately for their carriers to take orders for War Savings Bonds. The farmer can now make out his application and hand it over with money to his carrier. He will receive a receipt from the carrier and his War Bond will be delivered to him within several days. War Savings Stamps will be accepted for conversion into bonds.

HANDBOOK OF SCIENTIFIC AND TECHNICAL SOCIETIES, INSTITUTIONS. (Science, August 14) The National Research Council has recently issued the fourth edition of a "Handbook of Scientific and Technical Societies and Institutions of the United States and Canada" (National Research Council Bulletin No. 106, January, 1942; 389 pages). The United States section contains information on 1,269 societies, associations and similar organizations in the natural sciences and related fields that contribute to the advancement of knowledge through their meetings, publications and other resources. There are also included a number of more general organizations and special institutions supporting scientific research, as well as the constituent or affiliated societies of the three other national research councils of the United States--the American Council of Learned Societies, the American Council on Education and the Social Science Research Council. The Canadian section, compiled through the cooperation of the National Research Council of Canada, contains information concerning 143 organizations.

FEED BUSINESS RULED "ESSENTIAL." (American Miller, August) Key employes of the feed business have been classed as "necessary men" in the draft who will be entitled to deferred classification. This announcement was made by national headquarters of the Selective Service System on July 14. Feed men must establish that they are engaged in a business that is "Performing the service, governmental or private, directly concerned with providing food, clothing, shelter, health, safety, or other requisites of the civilian daily life in support of the war effort." Flour and other grain mill products, prepared feed for animals and poultry, starch, cereal, bakery products, etc., are among the food processing pursuits that are in the list of "essential" businesses.

ARMY BUYS BUTTONS MADE FROM TAGUA NUTS. (Agriculture in the Americas, August) The United States Army is reported to have purchased 2,592,000 buttons made from "vegetable ivory," a product of the tagua nut of Ecuador. The buttons are valued for military purposes because they withstand cracking under pressure and intense heat and remain colorfast through numerous washings.

AMERICAN STANDARDS ASSOCIATION AND WAR STANDARDS. (Science, August 14) The Federal Government has entered into a contract with the American Standards Association for the development of emergency or "war" standards for the War Production Board and the Office of Price Administration. The association is to provide services in creating standards. The Simplification and Radio branches of WPB and the Standards Division of OPA will supervise the work for the Government. As outlined in the June issue of Industrial Standardization, the association is now engaged on more than thirty emergency projects, and the number is increasing steadily.

FARM ITEMS AMONG "PRIORITY" IMPORTS. (War Letter for Agriculture, August 10) Several agricultural items are among some 500 placed on an emergency shipping priorities list for import, a step taken by WPB to guarantee preference in space on America-bound ships for items considered vital to the Nation's wartime economy. On the list are: White arsenic, pyrethrum, jute bagging, binding twine, hog bristles, burlap, hides and skins, cane sugar, cordage, long staple cotton and cotton linters, wool goose and duck feathers and down, line fiber flax, hemp, insecticides, beef and mutton tallow, oils, oleo stearin, and beeswax.

NEW WHEAT AND BARLEY. (American Miller, August) When cereal plant breeders at Cornell set out to correct the defects of the widely grown Polish variety of barley and the favored Yorkwin variety of wheat, a new wheat and a new barley resulted. Tests on more than 70 varieties and strains of winter barley indicate the superiority of a new Wong barley, developed in China by Sheo Wong, a former Cornell student. Hybrid 595, a complex cross-bred wheat, will gradually replace Yorkwin wheat, which composes 85 percent of the wheat grown in New York State. It is a stiff-strawed wheat, completely resistant to loose smut and superior to the Yorkwin variety as a pastry flour.

Wong barley and Hybrid 595 will soon be in the hands of certified seed growers. The 1942 barley crop is ready for harvest and yields on most farms will run forty bushels an acre or better. By 1943, providing it is a good wheat year, it is estimated that there will be between 8,000 and 10,000 bushels of Hybrid 595 seed available for distribution.

DAIRY COMMITTEE OUTLINES FUTURE TASKS. (The Creamery Journal, August) Delegates from 15 states attending the annual meeting of the United Dairy Committee, recommended the following activities: (1.) Encouragement of quality improvement campaigns. (2.) Investigation of the dairy equipment situation pertaining particularly to stocks of stainless steel frozen by government order. (3.) Securing of necessary facilities to handle the increased dairy production requested by the Secretary of Agriculture, particularly with respect to spray milk drying operations. In this connection, it was suggested that the committee should work for the appointment of a producer representative in the dairy division of the WPB Food Section. (4.) The purchase by AMA of not less than 100,000,000 pounds of butter to be used as a reserve against a possible future fat shortage.

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The Daily Digest

Prepared by the Press Service for the use of USDA employees. Views and opinions in these items are not necessarily approved by the Department of Agriculture.

Washington, D.C., August 19, 1942

WEEKLY WEATHER AND CROP BULLETIN. While there was some unfavorable weather during the past week--including too low temperatures in the interior valleys and Lake region, too much rain and cloudy weather in the middle Atlantic area, and continuation of local droughts in the South--the weather in general remained favorable for growing crops throughout nearly the entire principal agricultural sections of the country. The soil moisture supply is still unusually favorable; recent rains in south-central sections and much of the Southwest have relieved previous drought in many places. However, much of the Southwest is still too dry, including considerable portions of Texas, Arizona, and New Mexico.

In the Atlantic area and Appalachian Mountain sections sunshiny weather is needed badly. While many crops made good growth, there has been considerable damage to oats and hay in some sections, and also tomatoes and peaches, with farming operations largely at a standstill in many localities. There was also some interruption by rain to farm work in the Northwestern States, but elsewhere seasonal operations progressed favorably. Unusually good growing conditions, as a general rule, continue in the States between the Mississippi River and the Rocky Mountains, except for lack of rain in some southern localities and parts of Nebraska.

In the central States small-grain threshing made good progress with mostly satisfactory yields. In much of the Spring Wheat Belt frequent showers and heavy dews caused delay in harvest, especially in eastern and north-central portions of the belt; some damage to grain in shock is reported. In the Red River of the North Valley harvest is well along, while threshing small grains is about two-thirds done as far north as southern Minnesota.

Corn made favorable development, although warmer weather would be helpful in the central and northwestern portions of the belt in hastening maturity against possible frost damage. In the Ohio Valley the outlook remains promising, except in a few localities, principally in lower valley sections; recent rains have helped late corn in the southern portions of the valley. In the southern Mississippi Valley, including much of Missouri, considerable improvement is reported since rains came.

In the Cotton Belt temperatures ranged from above normal in the east to considerably below normal in the northwest. Most localities had light to moderate rain. In the central States of the belt, while recent rains have somewhat favored weevils, plants show good growth where rains relieved dry areas. In the eastern belt there was too much rain in some northern localities, opening was retarded and picking slowed up in the south, but the general situation continues satisfactory.

FUEL OIL SHORTAGE? (Business Week, August 8) The War Service Committee of the American Society of Heating and Ventilating Engineers is not inclined to put much stock in reports that have been coming out of Washington lately to the effect that maybe we'll avert that threatened fuel oil shortage, after all--thanks to improved facilities for petroleum transportation. Committee members foresee a repetition of the coal-less days of the winter of 1917-18. A furnace and stove fuel shortage isn't like an automobile gasoline shortage. If your gas is cut in half, your car runs only half as far, but you can probably find other supplemental transportation.

JULY INSPECTED LIVESTOCK SLAUGHTER OVER '41 LEVEL. (The National Provisioner, August 15) More than in 1941 was not enough--even though federally inspected slaughter of all classes of livestock during July was greater than in July, 1941, and only in hogs was materially below June, 1942, the supply of meats was not large enough (after needs of the armed forces and FSCC had been met) to satisfy domestic demand and shortages developed in Eastern cities. Since meat for the armed forces and the FSCC comes from inspected plants, and since these plants are also important sources of meat for urban centers in the East, the latter area suffered most acutely, particularly since local slaughterers were unable to take up the slack under existing conditions.

GROWING HERBS IN KEW GARDEN. (Medical Record, August) Deadly nightshade (bĕlladonna) is being cultivated at Kew's Royal Botanical Gardens in Surrey to let Britain's manufacturing chemists have the two and one-half tons of the medicinal herb needed for ailments. Kew is also growing colchicum, another herb, from bulbs collected by boy scouts in the English countryside. Kew had also set out to show the British housewife what can be done with the traditional English herbs. Dill, fennel, sage, chervil, marjoram and thyme are some of the many herbs now being grown there, and all provide flavorings for soups and other wartime dishes. In the midst of its 288 acres, where twenty-four thousand different species of plants from all climates flourish as they do at home, Kew has now a regulation ten-rod allotment with a woman gardener in attendance to help amateur food-growers with their problems of raising potatoes, carrots, onions and other vegetables.--Facts from the Royal Botanical Gardens, Kew.

FROZEN APPLE CIDER IN CALIFORNIA. (Quick Frozen Foods, July) Farmers on the highways leading to the Russian River resort area in Sonoma County, California, maintain roadside stands at which is sold, among other things, an apple cider which has been preserved by freezing storage. This product sells very well. A cold storage company interested several apple growers in this rather novel preservation method in 1939. They froze four hundred gallons that year in fifty gallon barrels. The following spring these were thawed and sold to the operators of roadside stands. The next year this group froze 4,000 gallons, which were sold over a period of four week-ends in the early spring. In 1941, 12,000 gallons were packed.

As the local market was already practically saturated, it was necessary to go farther afield. The other locker plants in the state have proven a fairly good outlet, since the cider is now packed in gallon jugs, and can be sold frozen to the locker patrons. It has been found possible to ship the cider in cartons of four gallon-jugs, as far

as Bakersfield, 300 miles distant (usually a 7 hour trip) by ordinary motor express. It is delivered in good condition. Frozen cider is sold for $.39 wholesale, $.50 retail per gallon at the locker plant, as compared with $.57 to $.75 for the pasteurized or benzoated ciders.

PREVENTING FOOD SPOILAGE IN WARTIME STORAGE. (Food Industries, August) In Britain, some important lessons have been learned about wartime food storage. Briefly they are these. There must be a nation-wide storage system, coordinated by a national control body, such as our Ministry of Food. When warehouses and food factories are carrying larger stocks of food than usual there is a great increase of vermin, encouraged also by war conditions such as air raid damage, so there must be efficient pest control supervision. There must be a central insect control body, with qualified biologists and mycologists of wide experience in industrial biology at the head. There are three phases, one dealing with rodent control, chiefly rats and mice, and the others with control of insects and of molds and bacteria. They make regular inspections, investigate complaints and recommend methods of checking infestation. An association of vermin poison and bait manufacturers, rat-fumigators, and so forth, works under contract.

When food cargoes arrive at a port or warehouse, they are examined by entomologists to see if they harbor any dangerous insect pests, or insects previously unknown here. Prompt action by these entomologists has already checked at the ports some that might have become nationally serious. Food supplies are scattered to avoid loss by fire and air raid damage. Vacant basements of old mills and other buildings in out-of-the-way towns are used to store food reserves, which are inspected periodically. The cold storage system and equipment have been nationalized, so that all resources can be used to the best general advantage. Under war conditons and with limited shipping space, food supplies cannot always be placed in rat-proof buildings, insulated transport trucks or ships specially designed for special food cargoes.

ARMY ORDERS WOODEN BEDS. (Business Week, August 8) Last week 15 furniture manufacturers in ten states from North Carolina to Massachusetts and Minnesota got a $2,500,000 order from the Army Quartermaster Corps. It called for half a million hardwood collapsible bedsteads. Thereby, the Army reversed an all-metal bed policy. Resistance of metal beds to insect infestation has always been considered their major advantage for barracks use. The official release says nothing on this point, makes much of the saving of critical materials achieved by the shift to wooden beds: 1,850,000 lb. of steel, 1,250,000 yd. of canvas, 1,500,000 yd. of webbing. The specifications permit any one of 13 different hardwoods, ranging from northern birch to southern tupelo.

RATIONED TEA AND COFFEE. (Business Week, August 15) Americans, who have come to look on Canada as a proving ground for each new wartime experiment planned for the United States, watched as the Canadian government inauguarated coffee and tea rationing. Weekly government allowances for each civilian were one ounce of tea or four ounces of coffee (not both).

QUICK FREEZING OF FOODS BY FARMERS (Quick Frozen Foods, July) On the Pacific Coast, in Oregon especially, there has been a demand for private freezer plants for farmers, particularly among the larger farm operators, where they are a long distance from locker plants. There is a considerable interest in Oregon for a type of layout furnished by F.E. Price, agricultural engineer, Oregon. While such plants began to appear in that state, the experiment station received more than one hundred letters from farmers asking for information as to how to build such a freezing plant for the farm.

REDWOODS SHOULD BE SAVED (Southern Florist, August 14, 1942) Although timber for lumber is a necessity, there would be great loss to the nation were the redwoods destroyed. The Save-the-Redwoods League warns that some of the finest of these redwood forests are directly in the path of lumbering operations, and there seems no way of saving them except by the plan of purchase under which the state of California pays half and the Save-the-Redwoods League aims to raise the other half. The cooperation of all patriotic Americans is solicited. Literature will be sent upon application to the League, at the University of California, Berkeley.

BEEF REFRIGERATION SPEEDED UP (N.Y. Times, August 18) -- Argentina's famed beef exports are being frozen by a new method that takes six hours instead of the several days required at present and will save 35 percent on shipping space, according to local packers, says U.P. item from Buenos Aires. By the new process the meat is sucked into hollow metal tubes by a vacuum. The meat in the tube is then frozen under a brine spray which is later removed by exterior heating.

CANADA INVESTIGATES PHOSPHATIC SLAG. (The American Fertilizer, August 1) At the recent Canadian Chemical Convention, one of the subjects discussed was the utilization of phosphatic open-hearth slag as a fertilizer material. According to the Canadian Research Council, the waste slag produced annually in the steel furnaces at Sydney, Nova Scotia, contains as much phosphoric acid and lime as 60,000 tons of 20 percent superphosphate and 100,000 tons of limestone, both of which are badly needed by the soils of the Maritime Provinces. Experimental work has shown that this slag can be cheaply prepared for the market by pouring it molten into water and subsequently grinding it to powder.

Chemical tests have proved that soil acids will more readily attack a rapidly cooled slag, so that much, and possibly all, of the contained phosphoric acid and lime become quickly available for plant growth. These results have been confirmed by the increased yield of barley grown on Nova Scotia soils to which the specially prepared slag had been applied. Field tests with oats and clover are under way on both the Central Experimental Farm at Ottawa and experimental stations in Nova Scotia.

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The Daily Digest

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FROZEN STRAWBERRIES FOR ENGLAND. (Ice and Refrigeration, August) A good market for frozen strawberries, to the extent of about a million pounds in 1942, was created through the efforts of the Surplus Commodities Corporation, the shipments going to Great Britain. Much of this crop came from Kentucky, according to the College of Agriculture and Home Economics of that state, the college as well as federal authorities having inspected the shipment. It is reported that Kentucky growers received about eight cents a pound for the berries before processing. Associated in furnishing the frozen berries were the Farmers' Processors' Cooperative Association at Bowling Green and Frozen Products, Inc., at Paducah, Ky.

The crop of strawberries this year in Kentucky is reported to have amounted to 816 carloads and about as many were shipped by truck. The crop was about three times that reported for 1941 in this state. In order to assure buyers and consumers of proper grading of the berries, the Kentucky college trained 24 inspectors for all principal shipping points in the state. This inspection also insured grading and labelling, so that top prices would be obtained for the crop.

DEALS WITH BRAZIL. (Business Week, August 15) Don't overlook the six commodity deals which the United States made with Brazil recently. They provide a criterion for similar measures soon to be completed in half-a-dozen other Latin American countries to aid their economics, and help meet shortages in the United States. The six commodities covered in the Brazil contracts, and the basic terms are:

Babassu--A four-year agreement to purchase unlimited quantities of either the nuts or their oil during the next two years, and up to 100,000 metric tons during each of the ensuing two years. Castor--A one-year contract to buy a minimum of 200,000 long tons of beans or oil equivalent during the fiscal year 1942-43. Cotton linters--A one-year contract, beginning Aug. 1, to buy up to 50,000 metric tons of second-cut linters, up to 8,000 tons of first-cut linters, and up to 10,000 tons of hull fiber. Burlap--An agreement to buy, before Dec. 31, 1943, up to 50,000,000 yd. of burlap made in Brazil, and up to 100,000,000 yd. during the second year of the contract.--Rotonone--A four-year agreement to buy at favorable prices up to 4,000,000 lb. annually of this insecticide base. Ipecac--An agreement that the United States and the British Empire, during the next 18 months, will buy up to 150 tons of this medicinal herb.

FOOD FOR THE NAVY. (Farm for Victory, August) During the year ending last June 30, the Navy bought over 910,000,000 pounds of food. Among the items making up that huge total were 12,168,000 dozen eggs, 192,874,000 pounds of fresh vegetables, 98,798,000 pounds of fresh meats and 86,119,000 pounds of bread and flour.

SUMMER ECZEMA IN DOGS. (Journal of the American Veterinary Medical Association, August): It was demonstrated in 1937 that the dog flea, is intimately concerned with the development and perpetuation of the common skin disease of dogs, popularly termed summer eczema. It was pointed out that the outbreak of the disease was coincidental with the seasonal appearance of fleas on individual dogs possessing a specific sensitivity to flea bites. The continued presence of fleas on the skin-sensitive dog was found to be responsible for bringing about the symptoms by which the disease is recognized, and these two factors---fleas plus sensitivity---were considered of primary importance. The absolute elimination of fleas as an exclusive therapeutic measure was found entirely effective in controlling the disease, and in preventing recurrence....

It was stated in an earlier report that the lesions of summer eczema are, for the most part, self-inflicted abrasions in various stages of healing. All symptoms of summer eczema, from its inception to the worst chronic stages, are fundamentally defensive maneuvers of the body against an external irritant which can not otherwise be successfully evaded. A prerequisite to the development of summer eczema is skin sensitivity of the individual. While there is as yet no means for testing the sensitivity of dogs to flea bites there are numerous ways by which sensitivity is manifested. The daily habits and behavior of the skin-sensitive dog will reveal certain characteristics of the potential victim of summer eczema. This type of dog shows a ready response to practically all stimuli and his reflexes are unusually sharp. He is likely to be more inquisitive and more alert than the average dog and he is easily startled by buzzing noises, especially those made by insects. He is fond of hunting such insects as beetles and house flies, but the blood-sucking flies frighten him. His skin response to the slightest contact is instantaneous. When groomed he is apt to turn his body in a half-curved position and execute scratching movements with one foot. The owner of such an individual will usually mention the fact that the dog is nervous or highly bred.

The dog is in truth, highly insect-conscious because of his sensitive skin and his anxiety is by no means unwarranted. The presence of a flea will cause him extreme uneasiness and he will perform sudden peculiar antics which often terminate with a frenzy of scratching. The continued presence of fleas ultimately leads to the development of a series of voluntary movements which soon become established as fixed habits. These habits consist of coordinated reflexes directed at removing, by means of friction, sources of skin irritation. The friction may be applied in several ways, by scratching, biting and licking, rubbing against stationary objects, crawling, or rolling on the back. Through constant practice these activities reach a remarkable state of efficiency and become automatic. ....The lesions are always preceded by vigorous scratching concentrated on one vigorous scratching concentrated on one spot and are essentially of the same character as friction burns. Fleas gradually migrate to a region of the body which is out of reach of the activity of the hind feet, and where the hair coat is heavy enough to provide some degree of protection against sudden dislodgement---the lower part of the back near the root of the tail, and during most of the day, conditions here for the feeding habits of the flea are most favorable.

The dog quickly learns the futility of scratching under this new situation where the fleas are out of range. The only way he can contact them is with his teeth and he proceeds to twist his body around and bite viciously at the lower back. The biting is done hurriedly and with little or no regard for the consequent effect on the skin itself. This effect is

almost immediate destruction of the hair and outer layer of the skin, and a bleeding, raw patch results which the dog licks carefully for several days afterward. Several of these patches may appear as the biting and licking continue. The scratching, biting, and licking motions are all voluntary responses to the irritation of flea bites, and when all three are in progress, with their resultant traumatic injuries, the full-fledged acute case of summer eczema is recognized.

There are but two essential points to remember: (1) The aggravating cause is simply a continuous cycle of fleas attacking the dog, and the dog attacking itself; and (2) The effect brought about indicates a functional accomplishment of the skin in achieving its purpose.

FIRST WOMAN "PROGRESSIVE BREEDER." (Holstein-Friesian World, August 15). Sarah Van Hoosen Jones, prominent Holstein breeder of Rochester, Mich., is the first woman in the nation ever to receive the Progressive Breeder's Registry Certificate from the national Holstein-Friesian Association. She received this certificate of honor on the basis of her herd of 150 registered Holsteins, 99 of which have freshened, with 87 of these home-bred. The production of the 81 cows completing their latest herd test year averaged 424.2 pounds of butterfat. Twenty-four of these cows were on a twice daily milking schedule while the remainder were milked three times per day.

SOYBEAN PLASTIC FABRIC. (N.Y. Journal of Commerce, Aug. 18) Glolene, a fabric made of a soybean plastic material, is being used in a fall line of dress pumps manufactured by a St. Louis firm. It has the cleaning properties of patent leather together with the softness of a fabric. It also has the luster of patent leather, but will not crack, scuff, wrinkle or crease.

SHOE RATIONING IN CANADA UNLIKELY. (Hide and Leather and Shoes, August 15) Shoe rationing in Canada at this stage seems unlikely. Government officials in general take the view that the leather industry, with the assistance of the government, is doing a good job in this war. The armed forces alone will need two million pairs of shoes this year and an additional million soles and heels for repairs. On top of that, there are the rapidly growing women's services. One of the important trade avenues opened up in this war is the sale of leather to Russia by Canadian tanners. This is an important trade route, since Canada is being paid in American dollars for the goods. On top of that, it enables an ally to get goods she badly needs. As long as the government can arrange for a steady supply of South American hides into Canada, Canadian tanners and shoe manufacturers can produce all the war requirements, and there will be enough leather left over, not only for civilian shoe consumption, but to permit a necessary export trade to Russia.

WOOL FOR THE ARMY. (Business Week, August 8) The Army is virtually taking over the entire market for domestic wool. At least, that's the way the trade interpreted the Quartermaster Corps-WPB announcement that the Army shortly would order several million yards of wool cloth, enough to take up approximately 200,000,000 lb. (grease weight) of wool still in the hands of growers from last year's clip.

BETTER GRAPES FORESEEN (N.Y. Times, August 19) Grape varieties with larger berries, earlier ripening habits, and a vigor never before known among grapes may well be the result of breeding experiments now being carried on in several parts of the world, according to Dr. H.P. Olmo, assistant professor of viticulture in the University of California College of Agriculture, says a bulletin of the University of Chicago. Some of these newer varieties are already being grown commercially, particularly the Muscat Cannan Hall produced for the European glasshouse trade. Others have been produced in the United States and in Japan. Dr. Olmo said that the university had been interested in these varieties, had produced some crossbreeding, and was able to obtain others for study from Japan before the war. At present most of these varieties have defects such as poor growth, irregular setting of fruit, and low yields that prevent them from being accepted for commercial production, Dr. Olmo pointed out. Crossing and selection among them by plant breeders should in time eliminate these undesirable characteristics, he said.

CANADIAN TIMBER CORPORATION. (Foreign Commerce Weekly, August 15) A government-financed corporation, to be known as Aero Timber Products, Ltd., has been created in Canada to increase the production of Sitka spruce suitable for aircraft construction. In 1941 approximately 75,000,000 board feet of Sitka spruce logs were cut in British Columbia, but they produced only 10,000,000 board feet of high-grade lumber suitable for the aircraft industry. The Canadian Government has issued an order requiring British Columbia sawmills to hold in reserve 75 percent of their output for the Canadian, United Kindgom, and Empire markets.

TO DISINFECT BABY-CHICK BOXES. (Journal of the American Veterinary Medical Association, August) Owing to a shortage of the cardboard boxes used in shipping baby chicks, these boxes are being returned to the hatcheries for repeated use. The boxes are frequently contaminated by adult poultry or the chicks themselves. Although there is no disinfection that will make the practice entirely safe, carefully painting the insides of the boxes with water glass (sodium silicate solution) will reduce the danger of infection. The box should first be scraped with a wire brush or steel wool to remove foreign material; next the inside is painted with equal parts of water glass and water; and lastly, the box is allowed to dry for at least a day before using. This treatment does not weaken the boxes nor affect the feet of the chicks shipped in them.--Ernest C. McCulloch and Steward A. Fuller, Washington State College.

COTTON STRAW HAT. (Business Week, August 15) The hatmakers of the country, now beginning to show their summer lines for 1943, are presenting a cotton straw hat that looks like and feels like a straw hat. Fabric is woven in close simulation of the various sporty straw braids that have displaced a large percentage of the hitherto standard sailors in the last three years. According to tests, the cotton straw material stands up as well as real straw in heavy weather.

During the straw hat season now on the wane, hat dealers were amply supplied, but supplies of straw braids and bodies for next year do not exist. About 90% of the popular straw braids, baku, cocoanut, and the like came from Asiatic sources now closed. The remainder came from South and Central America Straw hat business comprises about 40% of the 90,000,000-hat total of the industry, valued at $100,000,000, and the hat industry has thus far escaped allocations and rationing.

The Daily Digest

Washington, D.C., August 21, 1942

SWEET POTATO CANDY. (Food Industries, August) A new confection which elicited comment at the National Confectioners Association convention was the "yam-yum nougat," made from sweet potatoes. The formula of this and other unique candies displayed was developed to conform to available domestic materials. A minimum of granulated sugar is required. The chewy-type yam-yum is made from ground sweet potatoes, corn sirup and high-grade molasses.

FREIGHT RATES ON APPLES HELD DOWN IN AGREEMENT. (Better Fruit, August) Eastern and southeastern connecting lines have agreed to the adjusted eastbound freight rates on apples from the Pacific Northwest granted by the western lines in June. The new rates become effective August 24, in time for the opening of the 1942 crop shipping. The temporary freight rates which were in effect during the 1941-1942 shipping season expired June 30, 1942, and the increased rates published by the carriers in the spring became effective July 1. The adjustment, now made, is downward from the rates which went into effect on that date but they are considerably higher than those under which the 1941 crop moved to market.

FROZEN EGGS IN CELLOPHANE SAVE METAL. (Ice and Refrigeration, August) Frozen eggs are now being packaged in cellophane, with an outside overcoat of cardboard, as a further contribution to the metal saving program. Heretofore, eggs were removed from the shells poured into tin cans, holding 30 pounds each, and then frozen and stored. Because of the metal shortage, more than a score of egg-packers have turned to a new paperboard container lined with moisture-proof cellophane. The tin cans previously used required two pounds of metal each. The cellophane-lined containers have no metal at all, except for wire stitching in some instances. Thus substantial tonnages of tin and steel are being saved for direct war uses.

The new container, which is actually a leak-proof cellophane bag inside of a fibreboard box, weighs approximately 30 percent less than metal. It is rectangular instead of round, saving much shipping space. This permits carrying more frozen eggs in each refrigerator car. The new container also is less expensive.

NEW COFFEE QUOTA DECISION. (Foreign Commerce Weekly, August 15) To facilitate entry of coffee into the United States from countries which are nonsigners of the Inter-American Coffee Agreement, it has been decided not to allocate the nonsignatory quota for the year beginning October 1, 1942. An Executive order allocating the quota provided for countries which are not signatories of the Agreement terminates on September 1, 1942. Thus coffee may later be supplied by countries on the basis of available shipping rather than on quota alone.

RESEARCH AS USUAL. (Science, August 14) Scientific research is of prime value in the war crisis. Many of its good results are already well known. It is even possible that a single scientific discovery may tip the scales in favor of victory. But if one's accustomed field of research happens to be unrelated to any war activity, he can surely turn part of his attention to some of the many other necessary things that any educated person can do. This is not a suggestion that all scientific work not directly connected with the war should be even temporarily abandoned. There are some investigations under way which may be important later on and which if not finished now will be entirely fruitless. There are certain projects that must be executed now or never, such as the geological survey in the valley of the Colorado River, that was made a few years ago before the rising waters of Lake Meade covered the scene forever. There may also be a few scientists who would be of so little value in any other occupation that they might as well continue at their usual work. When allowances have been made for such exceptions, there still remains a large fraction of the available energy of the scientists of the country that could and ought to be diverted to the main purpose of saving the only type of civilization in which science can flourish and human happiness be widely attained.--Eliot Blackwelder, Stanford University.

SPENCER TO STUDY N.J. MILK DISTRIBUTION COST. (Milk Plant Monthly, August) Dr. Leland Spencer, authority on milk economics, Cornell University, has been engaged by N.J. Secretary of Agriculture W. H. Allen, acting for the State Board of Agriculture, to direct a study of the cost of milk distribution in New Jersey. It was stated that a preliminary report would be completed by December 1.

OIL FROM MEXICO'S "LIMA CHICONA." (Foreign Commerce Weekly, August 15) United States buyers of perfume oils probably will welcome the news that Mexico is producing a new type of oil from the "lima chicona," a type of lime. This experiment may disclose a substiture for Italian bergamot which is now scarce. During the latter part of 1941 and the early months of 1942 a lime-oil factory in Colima processed about 1,500 pounds of what is known as Mexican bergamot cold-pressed oil from the lima chicona, grown principally in the States of Jalisco and Michoacan. A ton of limas chiconas yields about 5 pounds of oil. Only small plantings of the tree have been made, however, and no immediate increase is anticipated.

CONTROL OF SWINE ERYSIPELAS. (Journal of the American Veterinary Medical Association, August) The culture-serum method immunizing healthy herds against swine erysipelas, on farms where the infection is known to exist, has been on trial in Nebraska, the state and federal bureaus of animal industry, state university and local veterinarians cooperating. Two methods have been used: (1) single serum-culture method and (2) the injection of a double dose of virulent culture 14 days after receiving the first treatment. The relative merit of the two methods has not been assessed. In general, however, the results were quite satisfactory in approximately 700,000 hogs so treated--95 percent exposed to undetermined degrees of infection were protected. As to the remaining 5 percent, some of the treated hogs, healthy before being vaccinated, lost their immunity and came down with the disease. Though the results obtained thus far are promising, the method is still experimental.

SIMPLIFIED WAR PACKAGES. (Business Week, August 15) Standardization of practice in the packaging of war goods has been nearly completed as a result of studies being made by the Army, Navy, and the Packing and Packaging Branch of WPB (formerly the Container Coordinating Section). Through the WPB branch and the services, standard package specifications have been worked out for all food items purchased by the Army and Navy.

The food specifications, approved last March, are the most specific yet arrived at. They establish for each food item--from beef to bay leaves--one or two standard size packages, a type of package for each such size, and a type of packing for the packages. Working out of standards for the 250,000 or so items of ordnance bought by the Army was the next big job tackled. It has not been the practice to specify packaging for ordnance beyond general language to the effect that goods shall be satisfactorily packed. Garbage cans used to be shipped empty, two to a crate. Now they are filled with clothing. Trucks, which take an enormous amount of space for their weight, are filled with canned goods.

KINDS, QUANTITIES OF FEED BAGS USED. (American Miller, August) A survey conducted by paper and textile bag manufacturers at the instance of the Millers National Federation reflected the scope of American feed trade by revealing the number of bags used in 1941. Of feed bags approximately 39,000,000 new burlaps were used, 38,000,000 second hand cottons and burlaps and 12,000,000 new cottons. The proportions of the different kinds of bags to be used in 1942 will undoubtedly be changed due to the elimination of burlaps, etc.

URGES MORE HORSES IN BRITAIN. (Journal of the American Veterinary Medical Association, August) The National Horse Association of Great Britain stresses the fact that the shortage of gasoline, oil and other materials is creating difficultires in commercial transportation which more extensive use of horses could relieve. The association points out that everything connected with horse transport (feed, harness, vehicles) are "home grown" and could, therefore, relieve the strain on oversea shipping. The short haul, particularly that involving many stops, is the province of the horse, the report claims. The question of relative costs is discussed in detail.--Veterinary Record, June 8.)

CONTINUOUS VEGETABLE PEELER. (Food Industries, August) For peeling potatoes, beets, carrots, turnips and other vegetables in food processing plants, an Illinois food machinery corporation has developed a continuous vegetable peeler. The manufacturer states that this machine will peel vegetables rapidly and economically, yet preserve the original shape of the vegetable. The machine consists of a feed hopper and four bins, each of which is equipped with four carborundum coated rolls, all turning in one direction at high speed. The four rolls in each bin are fastened together in pairs. Each of these pairs has a separate rocking motion that turns the vegetable over and over. In this way, the carborundum roll surfaces remove the peel completely as the vegetable moves through the machine, from feed hopper to discharge spout. The first, second, and third bins have coarse, rapid peeling carborundum rollers, while the rollers in the fourth and final bin are coated with fine carborundum to do a finishing job.

WALLACE HONORARY MEMBER OF NATIONAL ASSOCIATION OF SCIENCE WRITERS. (Science Service release, August 15) The election of Vice-President Henry A. Wallace to honorary membership in the National Association of Science Writers has been announced. The action was taken in recognition of the Vice-President's interest in the popularization of science and his research contributions in the field of genetics.

"PREFAB" ON PARADE. (Business Week, August 15) A typical job for prefabricators is the war housing development near the Norfolk (Va.) Navy Yard. Here 5,000 prefabricated and partly preassembled demountable homes are being built in five months to relieve a housing shortage. Each piece in each structure is made up in advance and assembled in the largest unit that can be handled manually. All industry watches such wartime tests as guides to the post-war possibilities of prefabricated home building.

FERN POISONING OF LIVESTOCK IN TEXAS. (Journal of the American Veterinary Medical Association, August) The disease of sheep, goats and cattle, popularly named "jimmies," has been reproduced experimentally by workers of the Texas Experiment Station with the cooperation of the Bureau of Animal Industry. The toxicosis was found to be caused by grazing the fern, Notholaena sinuata var. crenata, which flourishes from central Texas to California. With the moving westward of sheep raising, the disease has become one of the leading problems of the involved area. Deaths begin to occur in the middle of November and continue until green grasses become available in the spring.

FARMS UNFROZEN; STEADY RISE IN RURAL REAL ESTATE. (Business Week, August 8) Life insurance companies that became reluctant farm owners on a generous scale in the early thirties are now sliding out of their inadvertent investments on a road that is not only paved but oiled, greased, and down hill. During the first half of 1942 the rise in farm real estate values topped even the brisk rate of late 1941, and on this kind of market, insurance companies offering foreclosed farms for sale have come to the point of arguing about the price whereas they once were ecstatic at the mere sight of a potential buyer.

Iowa was the focal center of mortgage trouble at the bottom of the depression, and when insurance companies looked in their mortgage baskets at the peak of their acquisitions, they discovered they owned better than one-third of the farms in that state. By Jan. 1 of this year only 9% to 10% of Iowa farms were still held by the life companies. An Iowa State College tabulation showed 41 insurance companies with something over 6,000 farms for sale, a figure that represented a decrease of 25% in one year. And in Illinois today it is estimated that insurance companies hold less than one-tenth of 1% of farm land.

It is now a rare insurance company that has not disposed of half of its top holdings. Under the gradual evolution of better times, then the defense stimulus and finally war economy, sales policies worked through the initial period of dumping cats and dogs, rehabilitating worthwhile properties and actual farm operation, and on to shrewd dickering with increasingly numerous and eager buyers. Since the turn of the year, the volume of publicity on farm labor and equipment shortages has affected buyers, but on the whole only to restrain within reason the demands based on rising values, much higher cash farm income, and prospects for farm prosperity guaranteed by government loans.

The Daily Digest

Prepared by the Press Service for the use of USDA employees. Views and opinions in these items are not necessarily approved by the Department of Agriculture.

Washington, D.C., August 24, 1942

FREEZING VS. CANNING. (Quick Frozen Foods, July) The critical war materials used in canning are rubber, steel, tin and sugar. The only one used in freezing is sugar. Freezing and canning require about the same amounts of sugar. Assuming that glass cans are used, 100 cans will require a little more than 1 pound of rubber. If tin cans are used, 100 No. 3 (quart) cans will require about 32 pounds of steel and 0.6 pound tin. These amounts sound small, but it takes about 400 quart cans to preserve the year's meat, 500 cans for the fruits and vegetables for a family of five. Hence a family of 5 living on home canned food would require about 10 pounds of rubber or 300 pounds of steel and 6 pounds of tin. There are 1½ to 2 million lockers in the United States. If 750,000 farm families preserve their food in these lockers 3,750 tons of rubber or 112,500 tons of steel and 2,250 tons of tin are saved for the war effort. In other words, freezing will save a tremendous amount of critical war materials, transportation and labor for our fight for freedom.

SALTING GATHERED CREAM. (Food Industries, August) The addition of 10 to 13 percent of salt to cream, which may be held at Kansas summer temperatures for ten days before churning, gives 90 to 92 score butter, while unsalted cream yields only 86 to 89 score butter. Bacterial growth is definitely retarded, especially acid-forming types, and yeasts and molds do not develop. For farm use all the salt may be added to the can the first day, provided the contents are thoroughly agitated when cream is added on subsequent days. There are, however, two objections to salting. Dairy metal and tinned copper are noticeably corroded, so that stainless steel cans are necessary. Further, the process must be accepted by regulatory officials and creamery operators before being generally adopted by the cream producers.—Journal of Dairy Science, vol. 25, 59-70, January, 1942.

OXFORD INSTITUTE OF AGRICULTURAL ENGINEERING. (Science, August 14) The Times, London, points out that the Agricultural Machinery Development Board for Great Britain, which was set up at the beginning of this year to arrange for the testing of agricultural machinery and implements and to consider questions of uniformity and standardization, the provision of educational and advisory facilities, and any matters relating to the mechanization of agriculture, requires a highly qualified staff of agriculturists and engineers with adequate workshop facilities. A National Institute of Agricultural Engineering is accordingly being set up at Askham Bryan, near York. The nucleus of the institute is the Institute of Research in Agricultural Engineering at Oxford, which the University of Oxford has handed over to the Ministry.

REFRIGERATOR CARS FOR PERISHABLES ONLY. (Ice and Refrigeration, August) To avoid a shortage of refrigerator cars, Transport Controller T. C. Lockwood has instructed Canadian railway companies to distribute refrigerator cars for the shipment of perishable products only, the Transport Department announced. "In the past certain commodities such as canned and bottled goods have been loaded in these cars during the winter season to prevent freezing and damage, but such traffic can move during the spring, summer and fall season without damage, in boxcars," the statement said. "During the winter season, butter and similar commodities can move in boxcars, as these products do not require refrigerated equipment during cold weather."

DIVE BOMBERS FROM SKIMMED MILK. (Article by this title in Foreign Commerce Weekly, August 15) Casein appears destined to play an increasingly important role in the United States war effort, since it lends itself readily to a multitude of manufacturing processes. Products of every conceivable character, ranging from buttons to blankets and from dive-bomber parts to building materials, many of which are normally made of products now on the scarce list, can be and are being fabricated from casein products.

The War Production Board states that, of all the chemical materials it has studied, casein offers the best possibilities as a practical substitute material in many kinds of industry. Thousands of manufacturers can use the product, it is stated, since it cuts across industrial lines in almost every field and can aid materially in relieving shortages of chemical substances that are required for the manufacture of war implements.

While the United States is the world's largest producer of casein, this country normally imports large quantities from Latin America, particularly Argentina. Argentine casein plants are widely scattered about Buenos Aires at a distance inland of from 100 to 200 miles. Little labor is required in Argentina for the extraction of casein. One man, it is said, can take care of the coagulating, pressing, and grinding at a creamery, handling up to 10,000 gallons of milk per day. Argentine plants obtain up to 1 ton of casein from 65,000 gallons of skimmed milk. As our armament program progresses, it is likely that we shall be calling more and more upon Argentina and other Latin American Republics for casein.

ENRICHED FLOUR AND BREAD. (American Miller, August) Effective Oct. 1, 1942, Louisiana's House Bill No. 38, as passed by the state legislature and signed by Governor Sam Jones, becomes law. It provides that after that date no unenriched flour or bread may be sold in that state. South Carolina's mandatory enrichment law now is in effect.

With the cost of flour enrichment cut still further by a July reduction in thiamin quotations, the cost of vitamin B_1 now is 22% under the price announced last Jan. 14. The number of mills pledged to 100 percent enrichment of family-flour is increasing and thus paving the way for further decreases in the cost of enriching media.

INDUSTRIAL-EDUCATIONAL COOPERATIVE PLAN. (Science, August 14) A new cooperative program for industry and education has been initiated for chemists at the Illinois Institute of Technology. Fifty students have entered the first academic session of a cooperative course in chemistry, after completing sixteen weeks of work in industry, while a similar group will begin study in Septmber. The program is the first of its kind in the Chicago area, having been organized only this spring. For the last seven years a similar course has been offered in mechanical

engineering. Five hundred students are now included in that program. Plants cooperating hire the students in pairs so that one works while the other studies.

PHENOTHIAZINE PELLETS FOR SHEEP. (Journal of the American Veterinary Medical Association, August) Studies at the Washington Experimental Station show that phenothiazine-medicated pellets afford a practical, convenient and reasonably efficacious method/treating range sheep infested with Hemonchus contortus and Trichostrongylus colubriformis in the abomasum. For the individual medication of sheep with phenothiazine or for the preparation of phenothiazine suspensions, a mixture of 5 parts of phenothiazine with 4 parts of molasses forms a convenient and practical mass.

SOYBEAN OIL MEAL WITH PILCHARD FISH MEAL OR MEAT MEAL. (Egg & Poultry, August) The gross values of pilchard fish meal, soybean oil meal or meat meal and combinations of these products with a cereal basal ration were studied at the Washington Experiment Station. The soybean oil meal was combined with fish and meat meals on the basis of the percent of total supplementary protein furnished by each product. The gross values of the protein concentrates were: casein 100 (control), pilchard fish meal 109, soybean oil meal 85, and meat meal 33.

The chicks grew and utilized feed with essentially the same efficiency when the supplementary protein was furnished by 40 percent pilchard meal plus 60 percent soybean oil meal; by 50 percent pilchard meal plus 50 percent soybean oil meal or casein. When the supplementary protein was furnished by meat meal or any combination of meat meal and soybean oil meal, the gross values were less than that for soybean oil meal alone.

VICTORY CHICKENS. (Butchers' Advocate, August 12) It may sound odd to talk of surpluses these days when the Government is demanding more and more production. Yet these are surpluses of certain foods that spring up yearly, even in the face of war. But this year it's easier to get rid of surpluses. Here, the Agricultural Marketing Administration helps. Periodically, it designates certain foods as Victory Foods and backs it with a one to three week national promotion on the part of producers, shippers, distributors and retailers. Thus, a recent drive on broilers and fryers was very effective. The poultry industry has an unusual opportunity at the present time which limelights poultry as never before. It is one of the few foods that are plentiful, it has no ceiling and the Government is behind the move to "eat more poultry." Every producer and distributor should take part in this campaign.

AUSTRALIAN WOOL CLIP SETS NEW RECORD. (Canadian Textile Journal, August 14) The 1941-42 wool production in Australia was the largest ever recorded, according to the the International Wool Secretariat, London, Eng. The heavy clip was made possible by a sharp increase in the number of sheep shorn due to the decline in meat exports. On January 1 of this year it was estimated there were about 123,000,000 head of sheep and lambs in Australia compared with 121,600,000 one year previous and 118,800,000 two years previous. Favorable weather and satisfactory grazing are believed to have existed in Australia most of the past season and as a result fleece weights were probably similar to the 1939-40 season when a record clip of 1,121,000,000 pounds of wool were produced.

RABBITS AS FOOD. (San Diego Poultry Journal, August 10) The domestic rabbit may well have an important place in a Food for Freedom campaign. The home use of this fine-grained, pearly white, nutritious meat will not only release other meat for the armed forces and for exportation to our allies, but will add variety to the family diet throughout the war. Rabbit meat is quickly produced--only 90 days are required from the the time the doe is mated until the young rabbits are ready for the table. It is economical too--only 4½ lbs. of feed are required during this period to produce one pound of live weight. Older and heavier rabbits--those beyond fryer age--are excellent for a fricassee or a roast. A new leaflet, available free by writing the U. S. Rabbit Experiment Station, Fontana, Calif., gives details of care in producing family food from the small rabbitry.

STRIPPING "UNNEEDED GINS" FOR WAR. (News for Farmer Cooperatives, August) In half of the counties of the Cotton Belt only about 50 percent of the present gins will actually be needed to gin this year's cotton crop. In an additional 40 percent of the counties, one-fourth of the gins are superfluous. Because of this situation, increasing attention is being given by gin operators, cooperatives and others, to the possibility of closing down and dismantling many of these excess plants as a wartime expedient.

The first gain in stripping unneeded gins would be a material reduction in the amount of repairs, replacements, and personnel needed to keep them running. A second gain would be the shifting of excess equipment to more worthwhile uses. Cotton presses, for example, are likely to be needed in the baling of wool in order to conserve burlap and shipping space. Diesel, electric, and gas engines are needed to power many war industries--and of the 9,000-odd engines of these types in gins, hundreds could be released. Even the sheet metal with which most of the gins are covered is readily reusable.

WPB URGES "CLEAN SWEEP" OF STORED SCRAP. (Victory, August 18) The Conservation Division asks wholesalers and retailers to make a clean sweep-up of critically needed scrap material accumulated in their storerooms and shops. Burlap bags, old rope, rags, and rubber hose, tires and other salvagable articles can be found on every distributor's premises. If the merchant knew that the old stove lying broken up and useless on his scrap pile would make ten 4-in. shells, that the abandoned radiator will make seventeen .30 caliber rifles, and that the leaky wash pail will make three bayonets, he would collect every bit of salvagable scrap in his shop or storeroom and start it on its way to becoming valuable war material.

CONN. MILK LAW UPHELD. (American Milk Review, August) In the case of the Connecticut League of Dairy Farmers and Producer-Dealers vs. D. O. Hammerberg, Connecticut Milk Administrator, Judge Kenneth E. Wynne rendered a decision in favor of the milk administrator and upheld the questioned provision of the State Milk Control Law. In this case the complainant, the League of Dariy Farmers and Producer-Dealers, sought an injunction restraining the Administrator from enforcing that part of the Connecticut Milk Marketing Act which require producer-dealers to pool their own production with milk received from other producers.

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PRICE ADJUSTMENT METHOD ON FOOD ITEMS CONTEMPLATED. (War Letter for Agriculture, August 17) An alternative pricing method, designed to avert threat of disturbance to the country's food distribution system, will be given by CPA to wholesalers and retailers of food products, probably by mid-September. Advance disclosure of this step has been deemed necessary to permit wholesale and retail food distributors to contract at once with food processors for their coming year's merchandise. Use of March as the "ceiling price month" caught food distributors with many selling prices based on costs of inventories bought month earlier. Replacement costs had risen in the meanwhile for many items. Hence, these distributors could not re-stock, except at the risk of cash loss. This "squeeze," if not relieved, would have forced low-priced distributors -- both wholesale and retail -- to drop important lines of food products, with the result that the food would have moved to the consumer through distributors with relatively high ceilings.

The proposed general adjustment method will supplant the previous method of handling cases needing relief on an individual basis. The field studies now under way will play a large part in determining the exact extent of the squeeze on every branch of food distribution. Results of these studies, expected by early September, will determine the exact mechanism of the pricing formula to be used. Relief to be provided will be sufficient to permit both wholesalers and retailers to contract for the various packs as they are available for market.

"PUTTING PLANTFOOD TO WORK" (Farm Machinery and Equipment, August) "Putting Plantfood to Work" is an all-color, 16 mm. motion picture story of applying fertilizer. This picture interprets in 30 minutes of the silent and 20 minutes of the sound version the development of fertilizer application, the problems encountered, the experimental organization required to do constructive work, the movement of fertilizer in the soil under dry and wet conditions (animation), and the results obtained by experiment stations and by farmers using the better methods of application. Practically all the major crops and many of the minor crops are shown. There are both northern and southern editions.

This picture was produced by the National Fertilizer Association in cooperation with a number of agricultural experiment stations. The film will be loaned to Extension specialists, county agents, vocational teachers, and others. The only cost will be the return transportation. The sound version comes on one reel and the silent version on two 400-foot reels. Requests should give a selection of dates if possible and should be addressed to the National Fertilizer Association, 616 Investment Building, Washington, D. C.

CANADIAN ECONOMIC SITUATION. (Canadian Textile Journal, August 14) Coupon rationing of consumer goods in Canada--gasoline sugar and, now, tea and coffee--has become an integral part of the nation's war economy resulting from the steady worsening of the shipping situation. At that, the Canadian people are hardly yet feeling the pinch of wartime scarcity in goods. Consumer spending continues at record high rate, with the dollar value of departmental stores sales during the first half of this year estimated at 15 percent higher than the corresponding period of last year. Generally speaking, wage income and consumer spending this year have been the highest on record.

A decided decline in consumer spending is now in prospect, with accumulative effect during the coming months as the new income taxation deductions are made effective and war priorities on materials, labour and equipment capacity reach more and more into the supply of consumer goods. Canada has about, if not already, reached the limit of production capacity on manufactured goods, including materials of war, insofar as concerns labour supply and organization.

Concentration of industry for war goods production has become a problem of major importance in the labour field, and in many important instances shortage of raw materials, war priorities on electric power, and other factors are rapidly developing to bring the question of industrial concentration into public focus. Production of civilian iron and steel products is already reduced to the minimum and newsprint output is to be reduced by twenty-five percent in order to divert power to the war goods industries.

5,000,000 CASES OF SAUERKRAUT PACKED IN 1941. (Butchers' Advocate, August 12) Think of the amount of tin which could be saved in the war effort if the five million cases of sauerkraut which were packed in 1941 were entirely eliminated in 1942. Retail meat dealers many years ago sold practically all of the kraut that consumers used in the United States. This, however, was when bulk, or loose kraut, was sold in almost every meat market, combination store and grocery.

With the great increase in canned kraut sales, the bulk kraut business gradually diminished, and retail meat dealers lost a most profitable business, because the bulk of the canned crop has been sold and is being sold in grocery stores. Retailers of meats have a golden opportunity to regain this bulk kraut business which they lost through the year. It is the endeavor and effort of government agencies who are charged with the saving of tin to materially reduce the pack of canned sauerkraut in 1942.

POULTRY HOUSES OF PLYWOOD. (Egg & Poultry Magazine, August) Kansas poultrymen are using the new combination range shelter and brooder house buildings designed by Kansas State College. The houses are made of plywood and are so designed that they can be moved from place to place on the farm and can be used both as a brooder house and as a range shelter.

WOOL BALING PROGRAM CONTINUED. (News for Farmer Cooperatives, August) Co-op groups, agricultural colleges and others in the wool industry are cooperating in continuing the wool baling tests initiated and carried out by Farm Credit Administration at Stoneville, Miss., in February. Purchase of three cotton gin presses by Agricultural

Marketing Administration is included in the program. Moved from Texas, one will be operated in Colorado, one in Montana, and one in Oregon. Shortage of burlap to handle the 1943 crop appears to make rapid development of the baling program desirable. Wool baling also would result in a saving in transportation space and costs.

RESTRICTIONS REQUESTED ON CHEMICAL NITROGEN FERTILIZER. (War Letter for Agriculture, August 17) Fertilizer manufacturers have been asked by WPB to restrict their sales of fertilizer containing chemical nitrogen to 1942 vegetable production and in particular not to make sales of this fertilizer for use on fall-sown grains for harvest. Retail agents also are asked similarly to restrict their sales. This request is to apply in 17 States: New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, West Virginia, Ohio, Indiana, Kentucky, Michigan, Illinois, Wisconsin, Minnesota, Iowa, Missouri, Kansas. A conservation order is being formulated covering the manufacture and distribution of fertilizer throughout the country. The present request is designed to cover the situation in the interim.

EMPLOYMENT SERVICE TO CHECK NEED FOR TECHNICAL PERSONNEL. (Victory, August 18) Business establishments engaged in war production are going to be told within the next few weeks where and how they can obtain chemists, engineers, metallurgists and other professional and scientifically trained men, Paul V. McNutt, Chairman of the War Manpower Commission, announces. He said the U. S. Employment Service had been instructed to find out how many employees of this type war production plants will require before the end of the year and during 1943. With this information in hand the service can draw upon the country's largest registration of technically trained persons, the National Roster of Scientific and Professional Personnel.

STANDARD BREEDING RECEIPT. (New Jersey Farm and Garden, August) All of the national dairy breed associations have approved a standard form of breeding receipt, which will greatly simplify the registering of purebred calves resulting from artificial insemination. Furthermore, these clubs through the Purebred Dairy Cattle Association, of which they are members, are cooperating with artificial breeding associations, bull clubs and individual breeders to type the blood of widely used bulls, especially proved bulls.

REDWOOD BARK FIBRE USED FOR MULCHING. (Florists Exchange and Horticultural Trade World, August 22) A material manufactured from the bark of the famous redwoods of the far west, made in several grades of fineness, is recommended for mulching. It is sterile and is said not to harbor insects or diseases. Unlike most mulching materials, it is practically non-absorbent, allowing moisture to pass through readily, yet preventing soil moisture from evaporating. The coarser grade can be used on flower beds or borders to check weeds and retain moisture while the fine grade is efficient for seed beds. When worked into the soil, it serves to lighten and aerate heavy soil and bind sandy soil. Although wholly organic, it is almost non-decaying and thus its action is long lasting. One well-known California nursery firm reports the material as highly effective in preventing weed growth among primroses, tuberous begonias, callas, etc. and also in preventing the formation of algas in seed beds and pans.

NEW APPLICATIONS OF REFRIGERATION. (Refrigerating Engineering, August) In this war of machines, with its dependence on engineering and chemical research, refrigeration equipment is being applied for literally hundreds of uses, some of which cannot be revealed because of the requirements of the censorship. If engineers in this industry have been ingenious in the past, their opportunities for the future seem limitless, in view of the new uses hastily but effectively adopted to speed war production. Current uses include refrigerated low pressure stratospheric test chambers, application of refrigeration or air conditioning for blood plasma preservation, cutting oil and quench oil coolers, drafting rooms, tool rooms, blackout factories, steel mills, explosive plants, refineries, synthetic product manufacturing, the manufacturing of fine precision instruments, food storage and transport units, mobile or portable equipment for the various armed forces, etc.

AAN BEHIND FALL HARVEST SHOWS. (Southern Florist and Nurseryman, August 21) Participation in the Victory Garden harvest shows is given a paramount place in the program of the American Association of Nurserymen. The AAN is recommending that members contribute the equivalent of half their annual dues. Three of the items toward which this money will be applied are: A contribution of $3500 toward general headquarters expense (no paid executives) of the Harvest Shows movement; an equal amount as an underwriting fund for several major shows; and $3000 to insure the setting up of educational exhibits of home food storage, food preservation, and food canning at about 15 major shows. Plans of the show movement call for the holding of 20,000 community Victory Garden shows this fall, which it is hoped will take in $?,000,000 for Army and Navy relief.

BUILDING COOPERATIVE RESERVES IN WARTIME. (Farmers' Elevator Guide, August 15) Although governmental efforts are expected to minimize the rise and fall of prices, it is good business on the part of cooperatives to give thought to taking some steps on their own behalf. Substantial downward changes in the prices received by farmers reduce their capacity to meet obligations incurred when prices were higher. Collection of outstanding accounts receivable should be kept current (always a proper procedure), because it will never be any easier to keep accounts current than it is on the upswing of a business cycle. This is a substantial reason for insisting on prompt payment.

A closely related policy is that of properly exercising discretion in the selection of new credit accounts during the business upswing brought about by war influences. What has been said applies with equal force to credit accounts of farmers as well as to accounts owed to the association by trade outlets to whom producers' commodities have been sold. All this may be summed up by stating that rates of accrual for reserves for losses arising from both farmer and trade accounts should be thoroughly gone over and reconsidered in the light of changing developments.

LUMBER FREEZE ORDER EXTENDED. (War Letter for Agriculture, August 17) The construction lumber freeze order has been extended by WPB for an additional 15 days to August 27. The order previously had been extended to August 12. A new order is being prepared, establishing a system of control of softwood lumber distribution, which will replace the present order upon its expiration.

The Daily Digest

Prepared by the Press Service for the use of USDA employees. Views and opinions in these items are not necessarily approved by the Department of Agriculture.

Washington, D.C., August 26, 1942

WEEKLY WEATHER AND CROP BULLETIN. Fair and mostly warm weather over the late northwestern grain-producing sections was ideal for seasonal farm operations. In the interior States most of the week was fair, but in much of the Southeast and middle Atlantic area additional rains hindered outside operations. Fair weather and more sunshine would be helpful in the South and Southeast. Additional moisture would benefit growing crops in upper Michigan and most north-central districts. Conditions in the Great Plains continue favorable, except that rain is needed in southern South Dakota and most of Nebraska. In the more eastern States, where August rains have been heavy, there is considerable damage to crops, especially potatoes and tomatoes.

Threshing of winter wheat has been largely completed, except in the later northern and northwestern districts. In the Spring Wheat Belt conditions for harvesting and threshing were ideal. In the Pacific Northwest the winter variety is mostly harvested and cutting of other small grains progressing; storage space is a problem, with considerable grain piled outdoors. Preparation of land for fall seeding is advancing well, mostly under favorable soil conditions.

While corn made mostly satisfactory progress in the principal producing sections, warmer weather is needed in the interior valleys to hasten maturity against possible frost. In the Ohio Valley progress of the crop was good, except for too much rain locally. In central-northern districts growth was checked by the cool wave, although the general outlook continues excellent, with the bulk of corn in the hard roasting-ear stage.

In the Cotton Belt rainfall was widespread and substantial, except in more northwestern districts. Conditions were less favorable than in recent weeks. In central portions of the belt picking was slow where cotton is open. In the eastern belt, field work was interrupted by showers and picking retarded, with local damage by rain to staple.

In most of the Atlantic area and Appalachian Mountain sections, heavy August rains have resulted in considerable damage to many minor crops, especially potatoes, tomatoes, and melons. There are numerous reports of potatoes rotting in the ground; blight is extensive in the Atlantic area and westward over the Lake region to Minnesota. Soybeans continue generally in good condition, but in the upper Mississippi Valley they are weedy. Sugar beets continue to do well generally. In much of the South, fair, sunshiny weather is needed for truck and garden crops. In the upper Mississippi Valley the season for canning sweet corn and tomatoes has been unusually long, with good yields and quality. The Ohio Valley reports a good crop of clover seed. Pastures and livestock continue in mostly good condition.

NEW PLASTIC FABRIC FOR UPHOLSTERY. (Science Digest, September) A new plastic fabric for upholstery that is said to be stainproof, fireproof, and practically as tough as steel is getting attention at the Modern Plastics Exposition at the U. S. Department of Commerce. The new material is being tried on New York subways and is being investigated by the U. S. Maritime Commission for upholstering furniture on new passenger ships.

That the fabric can be washed with soap and water, does not retain heat like some chair covers, and is tough as steel are among claims made for it by the exhibitors. The material is a thermoplastic resin extruded in strands or yarn of various sizes and gauges that can be woven like cloth. It can be produced in practically any weave or color.

SPECIAL PERMIT FOR PRIVATE TRUCKS IN CANADA. (Canadian Textile Journal, August 14) After November 1 no private truck or trailer may operate more than 35 miles from its registered address without a special permit, according to an order issued by the Canadian Wartime Prices and Trade Board, designed to conserve and prolong the life of existing trucking equipment so that essential delivery services may be maintained as long as possible. Trucks and trailers registered or licensed by any province as a public vehicle operating for hire on August 1 are not affected by the order, nor does the limitation imposed on the radius of operation apply to vehicles owned or operated by the Dominion government, province or municipality or to certain other specialized types used for essential services. The exemption also applies to vehicles whose primary carrying capacity is occupied by mounted machinery or by mounted tanks designed to carry bulk liquids and to vehicles owned and operated by a public utility and used exclusively in services essential to its construction and maintenance.

FROZEN LAMB FROM TERRA DEL FUEGO. (Butchers' Advocate, August 12) The modern principals embodied in a quick-freezing plant have reached all the way to the southernmost tip of the American continents . . . Tierra del Fuego, Argentina, where the Argentine Meat Corp. has built a quick-freezing plant with a capacity of 60,000 lbs. a day. On this island (Fireland) are a million lambs of a new type, developed by cross-breeding Argentinian lambs with that from England and New Zealand. The result is a short-legged animal, with plenty of meat and comparatively little fat and bones.

Tierra del Fuego is south of Patagonia, and close by the South Pole. Here the temperature never goes above 65 degrees during the day, or 22 degrees at night. There are nine months of winter and three of summer . . . but the climate seems excellent for sheep raising, as there is plenty of good grazing grass and pasture. The population of the island is small . . . and almost half of the 3,000 persons there are in penal institutions. Assisting those who are free in the island's main industry, however, are about 10,000 dogs who help considerably to herd the sheep. The meat packing industry first came to the island when "Frigorifico," a meat plant, was built there 24 years ago. Each year, 40,000 head of cattle are slaughtered during the summer season (February, March and April).

One million lbs. of lamb cuts were frozen and a refrigerated boat took the lamb cuts, in excellent condition, to London. This same quick-frozen lamb (in small amounts) is now coming to the United States, with

permission from the U. S. Department of Agriculture. Tierra del Fuego has been found to be free of "hoof and mouth" disease, which plagues many other districts in South America and makes it impossible for them to export meat to this country.

NEIGHBORHOOD DELIVERY POOLS WORK. (News for Farmer Cooperatives, August) No doubt about the success of the local transportation pool—not among the farmers who have tried it out around Callao, Va. "We're saving trucks and tires, and we're saving time," sums up one of the members. "On top of that we're getting patronage dividends of neighborliness that would do your heart good!" So successfully has the plan worked out during the short period it has been in operation in the Callao area that Southern States Cooperative is recommending its adoption by all of its locals. It is being discussed this summer among Southern States' patrons over Virginia, Maryland, Delaware, and West Virginia, and the idea is rapidly catching on.

Neighborhood delivery pools now being organized are informal in type. They are not, strictly speaking, trucking associations and they do not involve the ownership or operation of trucks by the association. They are set up on a committee basis and they depend for their success on the energy and cooperativeness of the local groups. First step in the organization of a pool is the local meeting at which—if the plan is accepted—the farmers list their transportation facilities, including trucks, trailers, cars, and wagon teams, and pledge their availability for use. The next step is the appointment of a set of committees to formulate the working plan.

First there is the trading area committee made up of a farmer from each community within the trading area. Each member of this trading area committee is himself the chairman of a community committee made up of a farmer from each neighborhood. Finally each of the members of the community committee heads up a committee in his own neighborhood. The neighborhood committees work out the arrangements by which neighbors alternate with each other in providing trucks, cars, and wagons for carrying produce to town and supplies from town to farm.

Neighborhood clearing houses are an essential part of the plan. One of the homes with a telephone is designated to receive messages about errands and "pick-ups" that other families request, and to transmit these messages to the driver for the day. The clearing house also notifies the neighbors of trips that are being planned. The entire purpose of course, is to cut down needless and indiscriminate trips to town. When hauling is on anything but a "swap" basis, the rates are agreed upon among the committee members.

WOOD SUBSTITUTES URGED FOR MANY METAL PRODUCTS. (Victory, August 18) The wood furniture industry can help in alleviating shortages of many civilian products normally made of metal by using its facilities to make such articles out of wood, says the WPB furniture branch. High quality lumbers must be used primarily for military purposes, and the wood furniture industry should use the lowest grades that will yield cuttings of suitable quality and sizes. The following are examples of products that must be made of materials other than metal if adequate quantities are to be available for essential civilian and industrial purposes. Lockers, shelving, ice boxes, wash tubs, shipping containers, pails for home and civilian defense use, stirrup pumps for incendiary bomb protection, factory conveyors and track, lamps, trailers, and truck and bus bodies.

"SHORT LINE" FARM EQUIPMENT MANUFACTURERS. (Farm Machinery and Equipment, August) According to the last census of farm equipment production, over 1,000 manufacturers reported. Although the output of eight or ten companies accounts for most of the production, products of the small "short line" factories are of vital importance to the nation's food production program. Some of the "long line" manufacturers with large war orders may be able to offset some of their losses on repair parts business and when the war is over they can pick up where they left off. This is not true of the thousand small "short line" companies which cannot survive on a strictly repair business.

If the farmer is to be assured of repairs on these vital machines, the companies must be allowed to continue in business. The total tonnage of material used by these "short line" manufacturers is very small, and yet the need for their products and essential repair parts is imperative in many farming operations. Many of these small companies are located near the centers of war production areas. They are having trouble in meeting war labor competition. They are rendering a distinct service to agriculture and therefore to the nation.

ALL-OUT HUNT FOR SCRAP. (Implement & Tractor, August 15) There are three principal sources of scrap metal in the country. Foremost among these are the industrial plants where every ounce of waste material is now being carefully conserved and diverted back to the channels of steel production. The manufacturers are so concerned with the obtaining of steel for manufacturing purposes that they are automatically salvaging every possible pound.

The second source of scrap metal is to be found in the cities where there are small industrial plants, business establishments, railway terminals and the city homes. The National Salvage Campaign is so well organized that all scrap materials will be collected in the cities as well as on the farms.

But the largest potential supply of scrap metal and rubber right now is on the farms of America where old implements, scrap iron of all kinds are to be found in the fence rows, behind the barns, and under the sheds. It has been estimated that there is an average of more than a half-ton of scrap on each of the 6½ million farms. Ordinarily, farm scrap does not move into the channels of distribution readily since it is too expensive for the scrap dealers to drive out to the farms after this material. There is enough waste material on every farm to "sink a sub." No class of citizens are more loyal or patriotic than the farmers of America who are now laboring under extreme handicaps of shortages of men and machines and yet are striving to produce increased quantities of food products.

"SNAIL'S CLUB" HELPS KEEP TRUCK SPEEDS AT PATRIOTIC LEVEL. (Ice and Refrigeration, August) A Denver wholesale bakery, to conserve tires and gasoline, inaugurated a "Snail's Club." A placard bearing the legend, "— Snail's Club. I don't drive faster than 20 miles per hour. Ask me!" appears on the sides of the firm's trucks, arousing much curiosity, and resulting in many questions. In answering, of course, the driver explains the new delivery regulations and speaks proudly of his company's endeavor to help in the conservation program to the fullest extent.

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The Daily Digest

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Washington, D.C., August 27, 1942

U.S. SOLDIERS "DOWN UNDER" GET PLENTY OF FRESH BEEF. (The National Provisioner, August 22) Soldiers of the United States Army in Australia may be eating their way to a new world record in per capita meat consumption. With an average consumption of 321 lbs. per person in 1940, New Zealanders were the world's heartiest meat eaters. After a year's service in Australia, every American soldier there should have eaten approximately 365 lbs. of meat. Compared with 1940 figures, this would be 65 lbs. more than the yearly per capita consumption in Argentina, second greatest meat-eating country in the world; 160 lbs. more than the per capita total for Australia, third among the world's meat-eaters; and more than twice as much meat as is eaten by the civilian population of the United States.

At their camps near capital cities in Australia U.S. servicemen—in common with the Australian army and other Allied troops—enjoy first call on the meat that is slaughtered in civil abattoirs. When at their battle stations, no matter how remotely these stations are placed they also have fresh meat wherever it is humanly possible to get it to them. At one of the most remote battle stations of the vast Australian continent, nearly 1,000 miles from the nearest capital city, American troops sit down to meals of fresh, high quality beef. Such an achievement in food supply is possible because inland Australia has vast tracts of cattle-raising country which provide outback camps with constant supplies of meat on the hoof. The Australian army droves this cattle and pens it near the camps. An Australian butchery unit then slaughters, dresses and refrigerates it and serves it to the troops.

Supply of meat to the armed forces throughout Australia is facilitated by the natural dispersal of the meat industry in the six states. Whereas the highest percentage of cattle is raised in Queensland and the northern territory, the eastern states have the most sheep and pigs. Although production figures for the various types of meat vary throughout the Commonwealth according to the nature of the grazing lands, every state produces its own quota of beef, lamb and pork. After meat has been delivered at the camps, U. S. Army dieticians plan a weekly meat ration that will give the troops the greatest possible variety of meat dishes.

SOME RUBBER-SEALED CLOSURES MADE AVAILABLE. (War Letter for Agriculture, August 17) Stocks of rubber-sealed closures for food products have been "unfrozen" to a limited degree by WPB. Last April use of these closures was prohibited for approximately 40 groups of food products. Home-style processed pickles have been added to the list of 40 food groups covered by the earlier order. Packers may, however, use existing inventories of closures designed for home-style pickle jars.

CO-OPERATIVE RECONSTRUCTION: (Cooperative Digest, August) The International Cooperative Alliance before World War II represented 70,000,000 co-operative members in 39 countries. Dr Henry Shoskes is chairman of the executive committee of the International Committee for Cooperative Reconstruction with offices at 165 Broadway, New York City. General chairman is Dr. James P. Warbasse, president emeritus of the Cooperative League of U.S.A. The 33 members of the committee represent 13 countries so far (America, Poland, India, Canada, Estonia, Czechoslovakia, Denmark, Sweden, Argentina, Belgium, Columbia, Norway, Great Britain) and the program is spreading. Since 1921 Dr. Shoskes had been active in the co-operative movement in Poland where he organized nearly 600 " Peoples' Banks" and later headed the Central Cooperative Bank of Warsaw which averaged outstanding loans of $20,000,000 to 648 co-ops. Sixty percent of the farmers in Poland were members of the 2,735 agricultural societies before the war; made up 75 percent of the nation's co-operators.

LEAFLET TELLS ARMY HOW TO CARE FOR WAR LARDS. (The National Provisioner August 22) In order to inform army cooks and mess sergeants on proper methods of taking care of the new war lards, the American Meat Institute's lard committee prepared a leaflet accepted by the Quartermaster Corps and the Veterinary Corps of the Army. Approximately 25,000 copies of the leaflet are being distributed to individuals who received a copy of the National Live Stock and Meat Board's "Baking Manual for the Army Cook." The Institute has a quantity of the leaflets on hand and will furnish copies as long as the supply lasts.

The leaflet emphasizes that "good lard like good butter is best when fresh" and states that in the case of Type 1 war lard (no lecithin) refrigerated storage is preferred and that the lard can be stored for eight months at 30 to 40 degs. F.; five months at 40 to 60 degs. F.; three months at 60 to 70 degs. F. and one month at 70 to 80 degs.

MILDEWPROOFING OF MILITARY FABRICS. (Canadian Textile Journal, August 14) Treatment of sand bags, camouflage cloth and similar materials in order to render them free from mildew has assumed increased importance under the impetus of war. The most widely used mildewproofing agent used at present in treating sand bags, duck, etc., is copper naphthenate. This compound fulfills the essential requirements of a mildewproofing agent for burlap and cotton duck. Copper ammonium fluoride is also a good protective agent. Most mildewproofing agents now in use for military fabrics contain copper. Since the stock piles of scrap copper which have been used in the preparation of the protective agents are becoming low, substitute mildewproofing compounds will have to be sought. As substitutes, attention has been directed to surplus commodities such as rosin, turpentine, and pine tars, all products now available in large quantities. Similarly, other chemical compounds, such as pentachlorphenol, have been tried as mildewproofers. While some of these materials give promise, none of them, as used at present, is as satisfactory as the copper compounds already in use. The search for a cheap and easily obtainable new compound will undoubtedly contine.

PAINT FOR LARGE STRUCTURES. (Science Digest, September) The amount of paint required to cover certain large structures seems almost unbelievable. The San Francisco-Oakland Bay bridge requires 75,000,000

gallons. It takes 38 painters working 40 hours a week nearly 5 years to do the job. It is also said that a 10,000 ton cruiser requires almost 100 tons of paint for her hull.--American Journal of Pharmacy.

DECREASE IN ARGENTINE HIDE EXPORTS. (Hide and Leather and Shoes, August 15) A decrease in the volume of hides and skins exported from Argentina in the first five months of 1942 was shown by figures released by the U. S. Dept. of Commerce. Exports during that period decreased 14.7 percent in volume as compared with the same period in 1941, but values rose 21.9 percent. Cattlehides exported during the 1942 five-month period stood at 50,500, compared with 63,500 hides exported in the like period of 1941. On the same basis, sheepskins decreased from 5,800 metric tons to 5,500 tons. Values of sheepskins increased, however, from 2,516,000 pesos to 6,286,000 pesos.

FARM GROUPS ORGANIZE. (Hoard's Dairyman, August 25) The Agricultural Council of New England, Inc., composed of farmer-owned and farmer-controlled organizations, has employed an executive secretary and has established a permanent office in Windsor, Vt. They are organizing to combat the Lewis movement but are establishing an organization which might well be a cornerstone in New England agriculture for years to come. A program in relation to war and post-war problems and to remedy local or general problems involving commodity groups or the broader fields of New England agriculture is planned. The organizations represented have a total membership of between 90,000 and 100,000.

On June organization of the Interstate Farmers' Council was completed and a charter issued. This council comprises the major farm organizations operating in Delaware, Maryland, Pennsylvania, Virginia, and West Virginia. The purposes for which Interstate Farmers' Council is formed and the objects to be promoted by it are, in part, as follows: "To organize and conduct an agricultural council for the promotion of agriculture and for the purposes of mutual help, and other nonprofit purposes, no part of the net income of which is to inure to the benefit of any member. To promote the economic and social betterment of farmers and of agriculture in general. To protect the individual rights of its members and of farmers to prosecute their own business in their own way."

DRIED FRUIT PRODUCTION FROZEN BY WPB. (War Letter for Agriculture, August 17) The entire production of six dried fruits has been ordered held for the armed forces and lend-lease shipment. WPB has frozen both the 1942 production and the carry-over from the 1941 crop in the hands of packers. The supply not purchased by the Government will be made available for civilians. The affected fruits are dried apples, apricots, peaches, pears, prunes, and grapes (raisins). Estimated military and lend-lease requirements for some fruits equal or exceed indicated 1942 production and requirements for other fruits are heavy. Dried fruits constitute a desirable food in concentrated form. They can be stored for a reasonably long time, and can be packed in containers made from non-critical materials, so substantial quantities will be needed during the coming year to meet military and lend-lease requirements.

HOME MARKETS FOR N.J. FARM PRODUCTION. (New Jersey Farm and Garden, August). Studies are being made by N.J. officials to establish regional distribution of certain farm products. This means increased use of foods

produced nearby in order to ease the burden on the railroads. How far food traffic will be regulated is uncertain, but already those directing the study have cited how New Jersey tomato juice moving to the Middle West passes en route huge quantities of Indiana brands of juice moving to eastern markets. To avoid such cross hauls, market area allotments are in the wind. For instance, certain areas are suggested for Florida produce, particularly citrus fruits, and likewise for California products. To New Jersey farmers such moves probably would provide better local markets for Garden State perishables and present a real opportunity to establish their identity in the minds of nearby consumers.

FILM MAIL FOR JEEPS. (Science Digest, September) Recently the War, Navy and Postoffice Departments jointly announced that the first V-mail letters had arrived from abroad. Five days later the first outbound consignment of V-letters was handled in New York. Here is an ingenious method of photographing soldiers' letters to save 99 percent of their original air-mail weight. The American V-mail system was developed on the basis of England's "airgraph," which has been in use since April of this year and which knits the armed forces of the British Empire together. The British have been handling about a million airgraph letters in a week. Letters are photographed in miniature on film five-eights of an inch wide by an automatic camera which is a modification of the type used by banks to photograph paid checks. The films are then transported by plane.

DIFFERENTIALS VEGETABLE CANNERS USING LARGE SIZE CANS. (War Letter for Agriculture, August 17) Differentials for ceiling prices on canned vegetables in the 80-ounce No. 10 size can over the more generally used 16-ounce No. 2 size container have been established by OPA. This action will alleviate the difficulty of vegetable canners who had made no sales during the base period and were required to use their closest competitor's ceilings. Some 30 canned commodities are affected by the action: Artichokes, asparagus, snap beans, lima beans, beets, carrots, carrots and peas, celery, chili sauce, corn, okra, okra and tomatoes, parsnips, peas, pepper, pickles, rhubard, spinach, succotash, tomato catsup, tomato paste, tomato puree, tomato sauce, tomato juice, tomatoes, turnips, vegetable greens, vegetables mixed, vegetable juice, vegetable juice mixed.

NATIONAL ROSTER OF PROFESSIONAL PERSONNEL. (Science, August 21) J. S. Nicholas, Yale University, National Research Council representative on the National Roster of Scientific and Professional Personnel, sends the following details in regard to the work of the roster: The science section was initiated by utilizing the mailing lists of all cooperating scientific societies. To these have been added names secured from graduate schools of colleges and universities, including, in some fields, undergraduates. Individual departments of study, particularly in physics and engineering, have also been requested to submit names for questionnaire circularization. Additional information concerning scientifically trained personnel is now being added from the occupational questionnaires which are being filled out for draft boards as the result of the recent national registrations.

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The Daily Digest

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UNITED KINGDOM REPORTS LARGE TRACTOR GAIN. (Implement & Tractor, August 15) In the first five months of this year, 15,000 tractors have been added to the farms in the United Kingdom, R. S. Hudson, Minister of Agriculture, reported recently. With this increase, the United Kingdom now has 120,000 farm tractors in use, a gain of slightly more than 14 percent since mid-January. This addition of tractor units is expected to assist British farmers plow under 500,000 additional acres. During the last war, the 1918 arabel area in Great Britain and Northern Ireland was estimated at 17,000,000 acres. At the beginning of this war, the arable was 12,000,000. Since the outbreak of the war in 1939, the arable land has been upped to 18,000 acres.

FARM TRUCK LICENSES FOR YOUTHS 14-18. (Farm Bureau Monthly, August) In line with recommendations made by the California Farm Bureau Federation, the State Department of Motor Vehicles has announced a liberalization of policies affecting the issuance of operators' licenses to boys between 14 and 18, employed on farms in the movement of agricultural products vital to war effort. The department will, in most instances, permit them to drive farm trucks upon the applications of their parents provided suitable restrictions can be agreed upon. Ordinarily, they may require the applicant to drive only equipment owned by his parents or employer, to drive only on designated rur al routes or to drive only during daylight hours or other hours specified.

SCRAP COLLECTION. (Editorial in Farmers Elevator Guide, August) WPB sets up a General Salvage Section, with a director in each state. Under him are specialists--one on automobile graveyards, one on rubber, one on paper and rags, and so on. The director for Minnesota is L. E. Vorpahl; we use him for illustration. Under Mr. Vorpahl's supervision is a general salvage committee in each of the 87 counties in Minnesota. The chairman of this committee may or may not be chairman of the county defense committee. With this salvage chairman it is Mr. Vorpahl's desire to have on the committee in each county at least one farm implement man and one automobile man, and enough other committee members so there will be one for each township in the county. These in turn will enlist additional helpers so that every farm in the township will be individually visited and (with the farmer's consent, of course) literally "searched" for available scrap, especially rubber and metals.

The collection of scrap is not a "campaign"; it is a "program". It is not something to be done for a week or a month, nor even for a year, and then to be regarded as finished. While the war lasts, whether that be one year, two years, three years, the hungry maw of the steel furnaces and the rubber reclaiming mills will be crying to be fed. The scrap collectors will have to search, and search, and search again. Clubs and lodges, schools

. . .

and even churches, will be enlisted in the program. Those who do not have trucks to bring in their accumulations will be assisted by those who do, and the trucks of the commercial dealers in salvage materials will be called on to do double duty. From Minnesota alone there will be expected between now and winter a half million tons and more.

BIRDS MAY SPREAD TULAREMIA, SPOTTED FEVER. (Science Service release, August 21) Aerial spread rabbit fever (tularemia) and Rocky Mountain spotted fever is now suspected as a result of a discovery by Charles R. Joyce, Iowa State College entomologist, and Gaines W. Eddy, now of the Bureau of Entomology and Plant Quarantine, who found the nymphs and larvae of the common rabbit tick on 29 kinds of birds examined at the Tama Indian Reservation near Ames, Iowa. Although rabbit ticks rarely attach to man, and are therefore not directly responsible for transmitting the diseases, it is believed they spread the diseases among rabbits. From this reservoir of infection the diseases may spread naturally to other species of ticks, such as those which carry spotted fever. On one brown thrasher the entomologists found 495 young rabbit ticks, and a total of 2,111 were removed from 24 of these common song birds. Hosts for the young rabbit ticks included also the catbird, indigo bunting, wrens, towhee, robin, and other species of ground-feeding birds.

PLACE BAN ON CHEESE BOXES. (Dairy Record, August 19) Use of A-1 cheese boxes are banned for Lend-Lease shipments because of the poor condition in which the cheese has arrived overseas. According to large cheese dealers in the mid-west, there are at least a million boxes of this type now in storage which will have to be reboxed as a result of the order. The "B", "C", and "D" boxes which have been approved are in a limited quantity and the supply will not take care of the cheese industry's needs. Tests have been made on fibre boxes and this type of package has been approved for export shipment and is designated as the "E" box. Much cheese shipped overseas in the future may be in fibre.

SHORTAGES IN SUBSTITUTE MERCHANDISE. (Implement & Tractor, August 15) Shortages which have been apparent in many lines throughout the crop season are being followed by shortages in substitute merchandise which are seriously affecting livestock and small grain farming. In many sections of the Southwest, where water supplies are reaching mid-summer low levels, farmers are experiencing difficulties in obtaining wooden tanks. Dealers who have not been handling such products for a number of years have found their former sources of supply no longer exist and have been unable to get deliveries from other sources. Difficulties are also being experienced in obtaining sufficient materials for the consturction of wooden grain bins for wheat storage.

INDUSTRIAL NUTRITION ADVISORY SERVICE. (Science, August 21) The U. S. Public Health Service, in cooperation with the Office of Defense Health and Welfare Services, is carrying out a national industrial nutrition program. An industrial nutrition advisory service has been organized under the direction of Dr. W. H. Sebrell, director, Division of Chemotherapy, U.S.P.H.S., and deputy assistant administrator, O.D.H.W.S., and M. L. Wilson, assistnat administrator, O.D.H.W.S., and U.S.D.A. There are committees in forty-eight states and the District of Columbia, 2,500 county committees and community nutrition committees already functioning throughout the country with the advisory service of regional nutrition representatives of O.D.H.W.S.

"OVERSHOE" PRESERVES TIRES. (Science Digest, September) Although no accepteble solution to the severe civilian tire shortage is near at hand, recent developments show that at least one makeshift will soon be made available. According to a major tire maker, it will shortly announce an "overshoe" for tire casings. Made chiefly of cotton, the "overshoe" is understood to contain no strategic materials. Wrapped around the merest carcass, it is said to provide for another 2500 to 10,000 miles of service. But high-speed driving is out for two reasons; the substitute materials cannot withstand the greater forces and higher temperatures, and no non-skid tread is provided.—Automotive and Aviation Industries.

CANNED POTATOES FOR LEND LEASE. (News for Farmer Cooperatives, August) Canning potatoes for foreign shipment under the lease-lend program is one of the specialities of the Bay County Cooperative Cannery, Essexville, Mich. One of the four canneries in the country equipped to can potatoes, the cooperative is able through this outlet to utilize potatoes too small to sell otherwise.

BRITISH THATCH MAKING MACHINE. (Implement & Tractor, August 15) An invention patented in 1896 has been produced in a modernized power-driven version to help on Britain's agricultural front. It is a thatch-making machine which enables ricks to be covered at half the cost and one fifth the man-hours of the old method and is being made in hundreds for Britain's next harvest. Straw fed into the machine is stitched into a continuous mat, which is then cut into convenient lengths generally of 9 to 12 feet. The production rate is from 2 yards a minute, although one farmer claims that he can make a mile in a day. The job can be done at any time of the year and the matting stored in rolls until required.

County Agricultural Committees are finding that the machines solved many of Britain's wartime problems. Unskilled labor can be used either on the farm or in the committee's central depots, where lengths of matting can be made and distributed to farms in the locality. Ricks can be thatched immediately they are built, for there are no pegs to fall out and the normal sinking only pulls the stitches tighter, saving the use of rick covers and avoiding the risk of weather damage. While the rick is settling the thatch is completely gale proof.

INTEREST IN DEHYDRATED BUTTER. (Dairy Record, August) No development has created quite as much interest in creamery circles in the last decade as dehydrated butter. Some regard this development as a new epoch in buttermaking; all agree that it contains possibilities for considerable expansion of butter usage. Unfortunately, evidence is accumulating already that the creamery industry regards this new field as an opportunity to market undergrade butter. At least, our information is that 88 and 89-score butter is being utilized. Poor butter is poor butter, no matter what its form, and the quickest way to give the new process a black eye among consumers is to make dehydrated butter synonymous with undergrade butter.

MOHAIR RELEASED FOR CIVILIAN USE. (Victory, August 18) Mohair is released completely from the restrictions of the Wool Conservation Order. "We are releasing mohair from the restrictions to encourage manufacturers to use a larger quantity of mohair in civilian fabrics, since its military use has not developed as rapidly as anticipated," said Kenneth Marriner, chief of the WPB wool section.

FOOD PROCESSORS MUST KEEP WAR SECRETS. (New Jersey Farm and Garden, August) Food processors who are supplying the armed forces must keep war secrets hereafter. Deerfield Packing Corp., food processing end of the Seabrook Farms enterprise, received the notice in any army letter. The company must not publish photographs or drawings of any War Department canned or frozen purchases. In any advertising that mentions its location, it must not name any products being made for the War Department. It must not give out figures on production, numbers of employes, backlog of orders, or land area; must not permit aerial photographs of the plant nor movies of plant operations; and must not publish names of subcontractors or accessory manufacturers.

NATIONAL FROSTED FOODS WEEK TO PROMOTE FfF. (Refrigerating Engineering, August) Twenty-five thousand retailers of frosted foods from Maine to California will participate in a consumer education campaign commencing with National Frosted Foods Week, October 19-24, to implement the government's suggestion that civilian consumption of quick frozen perishables be increased to alleviate shortages of canned foods allocated to the nation's military and lend-lease needs.

FOOD'S PART EMPHASIZED BY FARM TOOLS, INC. (Implement & Tractor, August 15) A good example of the cooperation between implement and tractor manufacturers and the all-out war effort is the recent advertising campaign of Farm Tools, Inc., Mansfield, Ohio. The "Food Will Win the War" appeal was designed in its entirety to drive home to the implement and tractor dealer the important task that lies ahead of him in showing farmers how to make the most of the equipment he has and prepare him for impending shortages of farm equipment due to drastic priorities. The advertising strove to get the implement and tractor dealer to "carry the torch" in the best interests of his trade at a time when he had sufficient leisure to get better acquainted and to learn more about his trade's immediate problems.

CHEESE AS A VICTORY FOOD. (Editoral in The Dairy World, August) The dairy industry has been rallying to the request of Secretary Wickard to increase production of cheese for Lend-Lease requirements. Not only are Lend-Lease shipments being supplied to furnish this highly nutritional food for our Allies but there still is plenty for home consumption. A $200,000 advertising campaign is being launched this month, the U. S. Department of Agriculture has declared cheese a "Victory Food Special" for August 17 to 29, and the promotion is to be climaxed by "Cheese Week for All America" August 22 to 29.

ALASKAN CO-OP COLD STORAGE PLANT. (News for Farmer Cooperatives, August) In the "believe it or not" class is a cooperative cold storage plant in Alaska--one of the 21 units of the Matanuska Valley Cooperatives of Palmer, Alaska. This cooperative, with 256 members, had a total volume of business for 1941 amounting to $650,000, of which $32,000 was returned to members as net savings.

BIRDSFOOT TREFOIL. (Cooperative Digest, August) Last year fifteen New York growers organized the Eastern New York Birdsfoot Trefoil Co-operative, Inc. It sold $9,000 of the seed in 26 states and Canada. This year's business may top $25,000.

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The Daily Digest

Washington, D.C., August 31, 1942

CORRECTION: In the Daily Digest of Aug. 26, 1942, a trade paper item on page 2, headed "Frozen Lamb From Tierra del Fuego," erroneously stated that frozen lamb "is now coming to the United States, with permission from the U.S. Department of Agriculture." With reference to this statement, the Bureau of Animal Industry says: "No permission for the importation of fresh meat from Tierra del Fuego has been extended by the Department." Commenting on a statement in the item that 40,000 head of cattle are slaughtered each year on the Island, the Bureau says no cattle are slaughtered at the one export establishment on the Island.

PAO SANTO MAY REPLACE CORK: GROWS IN BRAZIL. (Science News Letter, August 29) Brazilian bark may substitute for cork. In a worldwide search, Pao Santo, bark of a free of which there are millions in Brazil, was judged to closely resemble cork from Portugal, Spain and North Africa. This bark has all the characteristics of cork but in lesser degree. It has been used for the past 20 years in Brazil for many of the purposes for which cork is used. The United States uses 120,000 tons of cork annually, and while supplies are not particularly low as yet and several substitutes are already in use for bottle closures, gaskets, life preservers and other uses, the Brazilian bark may yet be needed.

NEGRO FARMER COOPERATIVE. (Service, Tuskegee Institute, July) Several Negro farmers in Zion Grove Community, Mitchell County, Georgia, three years ago purchased cooperatively a tractor, peanut picker, hay baler, and a complete set of disc harrows. They used this machinery among themselves and their neighbors for three years, and last December traded it in on new machinery, paying a difference of $965. The new tractor is equipped with lights to enable working at night and many other improved attachments. Since December, these farmers have cut 800 acres of land for themselves and their neighbors, using labor from their own farms. With money received from neighbors for services rendered, this machinery is being paid for. Last year this firm picked 250 tons of peanuts, and with a tremendous increase in the acreage of peanuts for oil, they have set their goal at 600 tons this season.

BUYERS IN OTHER AMERICAS PAY FOR GOODS PROMPTLY. (Foreign Commerce Weekly, August 22) The semiannual survey of the Foreign Credit Interchange Bureau of the United States National Association of Credit Men says dealers in 21 markets in the other Americas are paying promptly for goods received from United States exporters. The survey points out that this is encouraging because "it occurs in a period that found our own country and many of our American neighbors engaged in an all-out war effort with consequent widespread economic disruption and dislocations."

DAIRY ROUTE CONSERVATION. (The Dairy World, August) Dairy-route conservation on tires and mileage should begin in the plant garage itself, according to the St. Louis Dairy Company, large St. Louis, Mo., organization. The company was recently cited by the city civic association as outstanding in cutting mileage 25% or more as requested by the government. In addition to cutting routes and delivery schedules drastically, the plant garage now spends from five to ten hours a day working on truck tires individually to give them longer serviceability. A regular tire maintenance schedule has been developed under which all of St. Louis Dairy's 445 trucks operate.

FARM PRODUCTS FOR WAR NEEDS. (Better Farm Equipment and Methods, July-August) Some of the nation's needs are described as follows by Gene Knight of North Carolina Agricultural Bulletins: We need 1½ billion pounds of peanut and soybean oil, or enough to fill tank cars to reach all the way across the United States and back; enough hogs to make a solid procession, two abreast, snout to tail, clear around the world; enough eggs so that if a person broke one every second, it would require 1,600 years to break them all; and enough 10-gallon filled milk cans to build 25 pyramids the size of the great pyramid of Egypt.

NEW NUTRITION PUBLICATION. (Science, August 21) The Nutrition Foundation has received new subscriptions amounting to $75,000. These, with subscriptions previously announced, bring the fund for the support of nutrition research to the sum of $923,500. Dr. Charles Glen King, scientific director of the foundation, announces the founding of Nutrition Reviews, a monthly journal of progress in the science of nutrition. Its purpose is "to bridge the gap between basic research findings and their acceptance with confidence, on the part of those who deal with the public, to enable them to keep abreast of current progress and to have available an unbiased, authoritative review of current research literature." Dr. Fredrick J. Stare, assistant professor of nutrition and biochemistry at Harvard University, was named editor of the new publication. It will be supervised by an editorial committee representing nutrition research and medicine.

DEHYDRATED DOG FOOD. (Western Livestock Journal, August) Makers of one of the largest selling brands of dog food announce development of a method of dehydrating dog food in such a way that the addition of water will quickly return the product to its normal consistency while retaining the characteristic color, odor and palatability. Laboratory tests have been completed and the new product is being marketed nationally.

ILLINOIS PLANS SCRAP HARVEST DAYS. (Implement & Tractor, August 15) More than 100 towns, cities and communities in Illinois are planning a Scrap Harvest Day to help in the collection of old metal as a part of the National Scrap Harvest. One of the Illinois plans provides for a Scrap Harvest Day to be sponsored by the Businessmen's Association in conjunction with the local salvage committee. The Scrap Harvest Day plan has been designed for use in every community ranging from one thousand population up to ten thousand or more.

SHEEP BREEDING IN AUSTRALASIA. (Western Livestock Journal, August) The wool growing industry has been largely responsible for Australia's prosperity in the past. At present, the pressing need for the tools of war has caused a phenomenal increase in heavy industry and it is conceivable that after the war, the transition to industrialization will become permanent. Even if this happens, however, Australia will continue to be one of the world's greatest wool producing countries simply by virtue of the fact that so much of the land is adaptable for nothing else.

Australia, about the size of continental United States, carries some 122,000,000 sheep, more than twice as many as we have in the United States. Some of the land is first class grazing land carrying two or more sheep to the acre, with the result that nearly all the breeds that we have in this country may also be found there. Under unfavorable conditions the Merino, of all breeds, is best able to thrive. Through drouth, heat and scant feed, no other "improved" wool producing breed can compete with it. The ungainliness of the Merino, its lack of fecundity, its lack of ability to produce fat lambs compared with other breeds, causes most sheepmen to raise sheep other than Merinos if others will thrive. Yet despite the fact that nearly all the breeds have been tried and despite the fact that some of them do well in the better areas, about 87% of all the sheep in Australia are Merinos. That percentage will probably not change greatly in the future, unless some new breed carrying a predominance of Merino blood is evolved.

HANDBOOK OF NUTRITION: IV, CALORIES IN MEDICAL PRACTICE. (The Journal of the American Medical Association, August 8: These special articles on foods and nutrition have been prepared under the auspices of the Council on Foods and Nutrition. These articles will be published later as a Handbook of Nutrition.—Ed.) Calories in medical practice are just as important as they ever were, in spite of the fact that attention has been centered on the vitamins. No supplements of vitamins or mineral elements can alter the laws of the conservation of energy. Calories are still needed to keep the body warm and to furnish energy for muscular work.

REFRIGERATION IN WARTIME ENGLAND. (Refrigerating Engineering, August) In an article by this title, by an editor of the British magazine, Modern Refrigeration, the new type of standardized cold storage plant now in use in England is described in detail. While built by the government as a wartime expedient, the design and construction of these cold storages indicate their permanence, the author says. The British government has seen the imperative need for additional refrigerated storage space, and the editor believes that this impetus will continue to be felt in the post-war period.

SHIPPERS MUST HELP KEEP RAIL CARS ROLLING. (Western Livestock Journal, August) Four million armed men need approximately 57 million lbs. of fresh meat (beef, veal, lamb and pork), and 31 million lbs. of cured, pickled, or processed meats, a total of 88 million lbs. each month. America's railroads will be called upon this fall and winter to move more livestock more miles than ever before. Stock car orders, with more accurate advance estimates by shippers, will be placed well in advance of shipping date. No excess cars will be requested, and any not needed will be released at earliest possible date so some other shipper can use them.

Livestock shippers will make extra efforts to have stock in yards, weighed, sorted, graded and, where possible, loaded in advance of train arrival on which the stock will move. Special switch runs, special services and special livestock trains for less than 25 cars are not possible during the war. Spreading out the marketing and shipping over a longer time and over more days avoids congestion in transportation, stock yards and meat packing plants, avoids extreme market price fluctuation and keeps Uncle Sam's boys supplied with an even, regular flow of meat. Every day (except Sunday) is a market day at the terminal livestock markets.

SOLICITOR'S OFFICE REORGANIZES. (Agriculture Exchange, August 19) The Office of the Solicitor has been reorganized. In order to integrate the design of the office to the wartime structure of the Department, as well as to minimize budget expenses and to secure the most effective utilization of his staff, Robert H. Shields has completely revised the framework of his office, both in Washington and in the field. In lieu of 44 separate field offices, there are now 12 regional offices, each serving, insofar as possible, all of the legal needs of the Department in the particular region. The diversity of its legal work is boundless. Attorneys in the Solicitor's Office have 29 regulatory acts to keep untangled. There are 3 corporation in the Department — FCIC, CCC, and FSCC. Everything from whaling expeditions to taking pot shots at forest rangers crosses the legal path of Mr. Shields' lawyers. It is no small job to keep over 75,000 Department employees walking the straight and narrow.

DEHYDRATION OF VEGETABLES. (The Fruit Products Journal and American Vinegar Industry, August) The drying of foods is an old process known to the ancient Egyptians and to the early Indian tribes of America. Dried meats and dried corn were staple foods of the Indians. Evaporated vegetables were served to the Union Armies in the Civil War, the purpose being to prevent and cure scurvy. But since anti-scurvy foods must be high in Vitamin C and since the methods of drying and storage then used probably did not retain C it is likely that the soldiers were not benefited very much. In the Boer War dried vegetables were used by the British Army; and several barrels of the dried products were stored and later used in the World War some 20 years after the Boer War had closed. In World War I some 9,000,000 pounds of dehydrated vegetables were used by the A.E.F. Most reports from those who served overseas and had eaten these products as served in the American Army indicate that the products were not very satisfactory. However, dehydrated potatoes of good quality were produced for the Army at that time (1917 and 1918). As at present they were packed in five-gallon tin cans. Returning soldiers reported that the potatoes were used very satisfactorily in hash with canned corned beef; and were much superior to the unblanched soup vegetables. Following the War several companies continued drying vegetables and tried to sell them to the civilian population; but without much success. Reasons given were high price per pound; bother of refreshing and cooking; and poor texture and flavor. During the early 1920's considerable pumpkin flour for use in pies was made in California and in the Middle West. It sold well for awhile and finally disappeared from the market. During that period also considerable sweet corn was dried and sold in the East and Middle West. Production of onion flakes and powder and garlic powder for canned soups, meat products and other commercial foods has endured.